

Port of San Francisco

Storm Water Management Plan

2003 - 2004



December 2003

Preface

Most of the storm water in the City and County of San Francisco (City) is collected in a combined storm and sanitary sewer system and treated prior to discharge to San Francisco Bay or the Pacific Ocean. Ownership of the separate storm sewer system within the City and County of San Francisco is divided between the Port of San Francisco for areas along the City waterfront and the San Francisco Public Utilities Commission for all other areas within the City's jurisdiction. This Storm Water Management Plan covers areas of the City under jurisdiction of the Port, while a separate Storm Water Management Plan produced by the San Francisco Public Utilities Commission covers non-Port areas of San Francisco.

The reason for two separate plans and programs is that land use and activities of concern for storm water within the two areas are quite different. The municipal separate storm sewer system (MS4) currently under SFPUC jurisdiction is comprised almost exclusively of small drainages within several of the City's parks. Land use associated with the Port's MS4 is almost entirely commercial and industrial, and includes a significant number of facilities already operating subject to requirements of the *Statewide General Permit for Discharges of Storm Water Associated with Industrial Operations*. The Port's efforts will focus primarily on maritime operations and commercial redevelopment, with targeted emphasis on activities along the northern end of Fishermen's Wharf, generally defined as north of Pier 41, and the Southern Waterfront, generally defined as the waterfront extending south of Mariposa Street to India Basin. The Port will develop programmatic efforts targeting the northern end of Fisherman's Wharf due to the concentration of commercial and industrial activities in this area, as well as stakeholder concerns expressed during programmatic public outreach performed during summer 2003. The Southern Waterfront is being targeted because of the significant level of redevelopment planned for this area in the near future.

Although the Port of San Francisco and the San Francisco Public Utilities Commission will administer their storm water programs separately, they will continue to coordinate on issues of mutual concern, including CEQA guidance for post-construction controls development, recycled water, and administrative procedures for code compliance. To institutionalize this coordination, the Port and the SFPUC will enter into a Memorandum of Understanding for storm water management and other water quality issues.

Port of San Francisco
City and County of San Francisco
Storm Water Management Plan
Table of Contents

1. Introduction.....	1
1.1 Purpose.....	1
1.2 Regulatory Background.....	3
1.3 Other NPDES Permits in San Francisco.....	6
1.4 Introduction to Plan and Section Descriptions	7
2. Background	9
2.1 Port Jurisdiction	9
2.2 Chronology of Port's Storm Water Program.....	10
2.2.1 Port Group Storm Water Monitoring Program	10
2.2.2 Port Storm Water Management Program Update.....	11
2.2.3 Southern Waterfront Storm Water Management Study	12
2.2.4 Port-wide Engineering Controls Technical Memorandum.....	14
3. Program Elements	15
3.1 Program Administration.....	15
3.1.1 Program Structure	15
3.1.2 Record Keeping and Reporting.....	16
3.1.3 Budget	16
3.2 Current and Planned Administrative Milestones	17
3.3 Minimum Control Measures/Measurable Goals.....	18
3.4 Program Contacts	19
3.5 Information Sheets.....	19
3.5.1 <u>Public Education and Outreach on Storm Water Impacts</u>	21
A. Information Sheet – Program	
B. Goals Sheet: Public Education and Outreach	
3.5.2 <u>Public Involvement / Participation</u>	25
A. Information Sheet – Noticing	
B. Goals Sheet: Public Involvement/Participation	
3.5.3 <u>Illicit Discharge Detection and Elimination</u>	29
A. Information Sheet – Program	
B. Information Sheet – Storm Sewer System Map	
C. Information Sheet – Ordinance	
D. Information Sheet – Plan	
E. Information Sheet – Education	
F. Goals Sheet: Illicit Discharge Detection and Elimination	

3.5.4	<u>Construction Site Storm Water Runoff Control</u>	40
	A. Information Sheet – Ordinance	
	B. Information Sheet – Erosion and Sediment Controls	
	C. Information Sheet – Waste Controls	
	D. Information Sheet – Site Plan Review	
	E. Information Sheet – Public Reporting	
	F. Information Sheet – Site Inspection and Enforcement	
	G. Goals Sheet: Construction Site Storm Water Runoff Control	
3.5.5	<u>Post-Construction Controls in New Development and Redevelopment</u>	51
	A. Information Sheet – Program	
	B. Information Sheet – Strategies	
	C. Information Sheet – Ordinance	
	D. Information Sheet – Operation and Maintenance	
	E. Goals Sheet: Post Construction Controls on New Development and Redevelopment	
3.5.6	<u>Pollution Prevention / Good Housekeeping for Municipal Operations</u>	58
	A. Information Sheet – Program	
	B. Information Sheet – Employee Training	
	C. Goals Sheet: Pollution Prevention/Good Housekeeping for Municipal Operations	
4.	Glossary.....	63
5.	References/ Internet Resources.....	68

Figures and Tables

Figure 1.	Map of the City showing Port 303(d) Receiving Waters	4
Figure 2.	Map of San Francisco showing Port and City Municipal Separate Storm Sewer System Areas	9
Figure 3.	Port of San Francisco Southern Waterfront Planning Area	12
Table 1.	Port of San Francisco 303(d) Receiving Waters.....	5
Table 2.	NPDES Permits for San Francisco Dischargers	6
Table 3.	Primary Audiences for the BMPs in Each Program Element.....	18
Table 4.	Port Storm Water Program Contact Persons	20
Table 5.	Emergency Response Agencies and Contact Numbers	31

Appendices

Appendix A	Southern Waterfront Storm Water Management Study
Appendix B	Port-wide Storm Water Management Plan – Engineering Controls Memorandum
Appendix C	Public Outreach Materials
Appendix D	Summary of Questions/Comments/Responses
Appendix E	Notice of Intent and Supporting Documentation
Appendix F	Port of San Francisco Storm Sewer Map

CHAPTER I INTRODUCTION

1.1 Purpose

Storm water management is a critical municipal responsibility. The effectiveness and efficiency of storm water management have a direct impact on public health and safety, surface water quality, wildlife habitat, and future development. Consequently, the Federal government amended the Clean Water Act (CWA) in 1987 to regulate the management of storm water runoff from municipalities and specific industrial classifications. Recent state and federal regulations ("Phase II") promulgated in response to those amendments require that designated municipalities obtain coverage under a Statewide General Permit by March of 2003. The Port of San Francisco has prepared this Storm Water Management Plan (SWMP) in fulfillment of the requirements of that permit.

The purpose of this SWMP is to describe efforts proposed by the Port as part of its Storm Water Management Program (the *program* is implemented subject to provisions of the *plan*). The SWMP includes a general outline of storm water management activities that will be undertaken during the first cycle of the statewide general permit, which extends through 2008. Activities proposed for the current fiscal year (July 2003 through June 2004) are described in greater detail. The plan has been built around a suite of programmatic elements that the Port intends to implement, or is in the process of developing for implementation. Together, these programmatic elements address the six minimum control measures required under the Statewide General Permit:

- Public Education – The Port must educate the public in its permitted jurisdiction about the importance of the storm water program and the public's role in that program.
- Public Involvement / Participation – The Port must comply with all state and local notice requirements when implementing a public involvement/participation program.
- Illicit Discharge Detection and Elimination – The Port must adopt and enforce ordinances or take equivalent measures to prohibit illicit discharges. The Port must also implement a program to detect illicit discharges.
- Construction Site Storm Water Runoff Control – The Port must develop a program to control the discharge of pollutants from construction sites greater than one acre in size within its permitted jurisdiction¹.
- Post-Construction Storm Water Management in New Development and Redevelopment – The Port must require long-term post-construction best management practices (BMPs) that protect water quality and control runoff flow be incorporated into development and significant redevelopment projects².

¹ Permits and approvals obtained from the Bay Conservation and Development Commission (BCDC) may include requirements for the control of storm water runoff control from construction sites less than one acre. BCDC requirements are not addressed within the context of this document.

² Best management practices are defined as schedules of activities; prohibitions of practices, maintenance procedures, the use of pollution control devices and other activities used to prevent or reduce the amount of pollution introduced to receiving waters from storm water runoff. Stated more simply, BMPs are actions, devices or

- Pollution Prevention / Good Housekeeping for Municipal Operations – The Port must examine its activities and develop a program to prevent the discharge of pollutants from these activities. At a minimum, the program must educate staff on pollution prevention and minimize pollutant sources.

The Plan is designed to reduce the discharge of pollutants from the Port's municipal separate storm sewer system (MS4) to the maximum extent practicable (MEP)³ and to protect water quality. There are no residential areas located within Port jurisdiction, so the Port's efforts will focus primarily on commercial and industrial activities along the San Francisco waterfront, including maritime operations extending south from the Hyde Street commercial fishing harbor to Pier 96. Based on the activities that occur along the Port waterfront, the pollutants of concern targeted by the Port's Storm Water Management Program will include:

- Suspended Solids (e.g., sediment)
- Litter
- Heavy Metals (specifically Copper, Nickel and Zinc)
- Petroleum Hydrocarbons

The Port will also need to comply with federally mandated total maximum daily loads (TMDLs) assigned to storm water discharges for certain pollutants. As an impaired water body, the San Francisco Bay can only assimilate certain amounts ("loadings") of particular pollutants. The Regional Water Quality Control Board is responsible for defining TMDL limits for each impairing pollutant, and assigning waste load allocations to different discharges to the Bay, including storm water. Further discussion of water quality impairment is included in the next section of this chapter.

design considerations that are used to reduce the impacts of development or human activities on water quality. Used individually or in combination, BMPs are intended to be a cost effective, practicable means to reduce pollutants and/or the amount of runoff that reaches receiving waters.

³ MEP is the technology-based standard established by Congress in section 402(p)(3)(B)(iii) of the Clean Water Act. Technology-based standards establish the level of pollutant reductions that dischargers must achieve. MEP is generally a result of emphasizing pollution prevention and best management practices such as source reduction or avoidance as the first line of defense and treatment methods as an additional line of defense, if necessary and applicable.

1.2 Regulatory Background

Storm Water Regulations - In 1972, the Federal Water Pollution Control Act (subsequently referred to as the Clean Water Act) was amended to prohibit the discharge of pollutants to waters of the United States from any point source unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit⁴. The 1987 amendments to the CWA added Section 402(p), which established a framework for regulating storm water discharges under the NPDES Program. Consequently, in 1990 the United States Environmental Protection Agency (USEPA) promulgated regulations for permitting storm water discharges from specified types of industrial sites, including construction sites that disturb five acres or more and municipal separate storm sewer systems (MS4s) serving a population of 100,000 people or more. These regulations, known as the Phase I regulations, require operators of medium and large MS4s to obtain permits for the discharge of storm water runoff from municipal collection systems to receiving waters. The majority of San Francisco is served by a combined sewer system and was not subject to the Phase I regulatory threshold⁵. However, the Port and a number of its tenants were subject to and obtained coverage under an Industrial Storm Water Permit because certain activities defined by regulation were conducted in areas of the Port discharging to separate storm sewers.

On December 8, 1999, USEPA promulgated regulations, known as Phase II, requiring permits for storm water discharges from Small MS4s and from construction sites disturbing between one and five acres of land.

A Small “MS4” is defined⁶ as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) designed or used for collecting or conveying storm water;
- (ii) not defined as a “large” or “medium” MS4 (e.g., subject to Phase I regulations);
- (iii) which is not a combined sewer; and
- (iv) which is not part of a Publicly Owned Treatment Works (POTW)⁷.

Under the Phase II regulations, the threshold for needing a municipal permit has been lowered to include designated small municipal separate storm sewers located within an “urbanized area” (defined by the Bureau of the Census). The Port’s separate storm sewers are located within an urbanized area defined by the Phase II regulations (see section 2.2 for a description and map of the City’s MS4s).

Federal regulations allow two permitting options for storm water discharges, individual NPDES permits and general NPDES permits. The State Water Resources Control Board (SWRCB)

⁴ *Point Source* is a Federal Clean Water Act term describing any discharge to surface waters from a discernable, confined and discrete conveyance such as a pipe, ditch, or channel.

⁵ Combined sewers collect both sewage and storm water runoff in a single set of pipes. In San Francisco, the commingled sewage and storm water is sent to one of three wastewater facilities for treatment prior to discharge to the Bay or Ocean. The combination of sewage and storm water in the same set of pipes creates a special set of problems during heavy rain events, during which time the combined flow can exceed the capacity of the City’s treatment facilities. In 1994, the USEPA promulgates its Final Combined Sewer Overflow policy for combined sewer systems. Elements of this policy include control measures to reduce the impacts of combined sewer overflow events.

⁶ State MS4 General Permit and 40 CFR §122.26(b)(8)

⁷ (e.g., Southeast and Oceanside Water Pollution Control Plants in San Francisco)

along with its Regional Water Quality Control Boards (RWQCB) have been delegated the authority by USEPA to implement and enforce the NPDES program in California. The State Board has elected to develop a statewide general permit in order to efficiently regulate the numerous Phase II storm water discharges under a single permit. The primary requirement under the General Permit is to develop and submit to the State a Storm Water Management Plan, and to implement, maintain, and enforce an effective Storm Water Management Program.

USEPA 303(d) Listings - Under Section 303(d) of the 1972 Clean Water Act states, territories and authorized tribes are required to develop a list of water quality limited segments. The waters on the list do not meet federal and state water quality standards, even after point sources of pollution (e.g., wastewater treatment plants) have installed the minimum required levels of pollution control technology. The law requires that these jurisdictions establish priority rankings for water on the lists and develop action plans, defined as Total Maximum Daily Loads (TMDL), to improve water quality. Local storm water agencies will be required to comply with TMDL requirements, which may include modification of SWMP performance standards to incorporate additional pollutant controls.

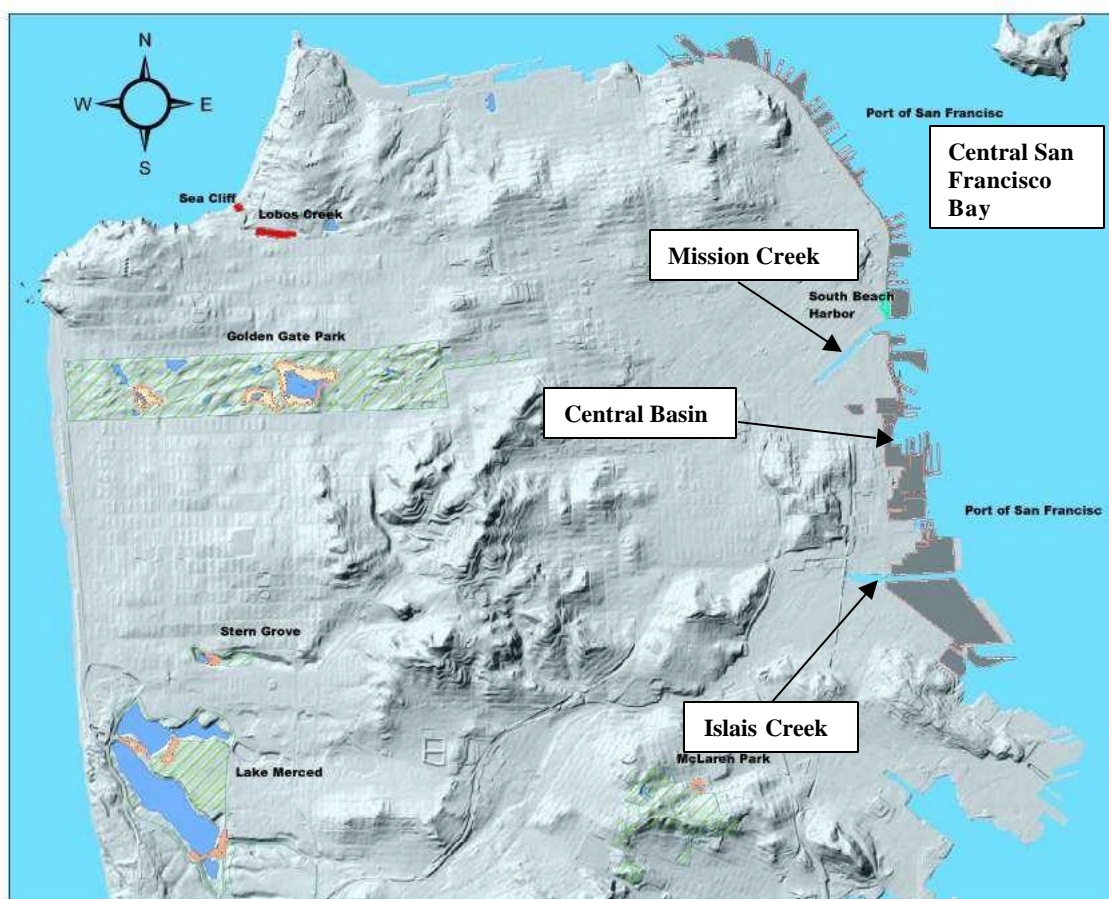


Figure 1: Port of San Francisco 303(d) Receiving Waters⁸

⁸ Figure 1 does not identify San Francisco 303(d) waters located outside Port jurisdiction.

Table 1: Port of San Francisco 303(d) Receiving Waters

Water Body	Pollutants of Concern	Comments
Central San Francisco Bay	Chlordane, DDT, Dieldrin, Diazinon, Dioxins, Furans, Mercury (water column and sediment), PAHs (sediment), PCBs, Selenium	Chlordane, DDT and PCBs attributed to legacy (historic) sources. Dioxin and furan attributed to atmospheric deposition. Selenium attributed mainly to agricultural and industrial point sources. PAHs attributed to storm water runoff and municipal and industrial point source discharges. Mercury is attributed to a wide range of sources, primarily historic resource extraction.
Central Basin, San Francisco	Mercury, PAH (sediment)	Central Basin is located north of Pier 70 and east of Piers 60-66. Hydrocarbon contamination is documented in soil and sediments in the vicinity of Pier 64, resulting primarily from historic petroleum tank farm operations, as well as historic coal gasification at the PG&E Potrero Power Plant site.
Mission Creek	Ammonia, PAH Chlordane (sediment) Chlorpyrifos (sediment) Chromium (sediment) Copper (sediment) Dieldrin (sediment) Hydrogen Sulfide (sediment) Lead (sediment) Mercury (sediment) Mirex (sediment) PCBs (sediment) Silver (sediment) Zinc (sediment)	RWQCB staff estimates the aerial extent of impacted sediments to extend from the foot of the creek at 7 th Street to the 4 th Street Bridge. Port storm water outfalls are located northeast of the 4 th Street Bridge, downstream of the area of impact.
Islais Creek (west of Third Street Bridge)	Ammonia Chlordane (sediment) Dieldrin (sediment) Endosulfan sulfate (sediment) Hydrogen Sulfide PAHs (sediment) PCBs (sediment)	Port storm sewer outfalls are located downstream (east) of Third Street Bridge, outside the area designated for 303(d) listing. Overland flow of storm water runoff occurs along a narrow band of shoreline west of Third Street Bridge.

1.3 Other NPDES Permits in San Francisco

The State Board's Industrial General Permit covers specified industrial activities at the Port of San Francisco. Currently, dry and wet weather discharges from the City's waste water treatment facilities are covered by three NPDES permits, listed below in Table 2. San Francisco Drydock discharges process water associated with its drydocking operation at Pier 70 subject to an NPDES permit that includes provisions for storm water management. Hanson Aggregates discharges sand washing process water for its operation at Pier 92 subject to requirements of a site-specific NPDES permit. Activities at San Francisco Drydock and Hanson Aggregates at Pier 92 are not included in the Port SWMP.

Table 2. NPDES Permits Covering San Francisco Dischargers

Permit	Discharge Type	Geographic Area	Issuance Date	Permit No.	Lead City Dept / Agency
Existing					
Southeast, Northpoint, & Bayside Wet Weather Facilities	Sanitary / Combined sewer overflows	Bayside	June 2002	CA0037664	SFPUC
Oceanside	Sanitary / CSOs	Oceanside	August 2003	CA0037681	SFPUC
Industrial General Permit	Industrial Storm Water	Port of San Francisco	April 1997	97-03-DWQ	Port of San Francisco
Hanson Aggregates	Process Water/ Storm Water	Port of San Francisco Pier 94	December 1998	CA0030139	RWQCB
San Francisco Dry Dock	Process Water/Storm Water	Port of San Francisco Pier 70	June 1999	CA0005321	RWQCB
New					
Phase II Municipal General Permit	Municipal Storm Water	Municipal separate storm sewer areas: <ul style="list-style-type: none"> Port of San Francisco Various City Parks 	April 2003	Order# 2003-0005-DWQ; Permit# CAS000004	Port of San Francisco/ SFPUC

1.4 Introduction to Plan and Section Descriptions

The Plan contains the following sections:

- I Introduction – Describes the purpose and organization of the Storm Water Management Program, as well as the relevant regulatory requirements.
- II Background – Describes evolution of the Port's storm water program and provides discussion of the City's combined sewer system as it relates to property under the Port's jurisdiction.
- III Program Elements –
 - 3.1 Program Administration – Provides information on organizational structure, administration, key contacts, program resources, record keeping, legal authority, and reporting.
 - 3.2 Current and Planned Administrative Milestones – Describes efforts performed to date to develop organizational structures and procedures for program administration. Presents future goals for program development.
 - 3.3 Minimum Control Measures/Measurable Goals – Describes the Federal and State requirements for the minimum control measures, as well as their applicability to various audiences targeted along the Port waterfront.
 - 3.4 Program Contacts – Lists the Port staff responsible for implementing specific control measures described in this Plan, as well as RWQCB storm water program staff.
 - 3.5 Information Sheets - Describes the Federal and State requirements for the minimum control measures and presents a series of information sheets describing current and planned activities including best management practices, measurable goals, targeted audiences, and roles and responsibilities for the six minimum control measures:
 - Public Education and Outreach on Storm Water Impacts – Describes outreach activities educating the public about the impacts of storm water discharges on water bodies and the steps members of the public can take to help reduce pollutants in storm water runoff
 - Public Involvement / Participation – Describes the Port's efforts to ensure that members of the community have the opportunity to participate in development of the Port's Storm Water Management Program
 - Illicit Discharge Detection and Elimination – Describes the Port's program to detect and eliminate both illicit connections and discharges to storm drains and illegal dumping
 - Construction Site Storm Water Runoff Control – Describes activities to reduce pollutants in storm water runoff from construction activities
 - Post-Construction Storm Water Management in New Development and Redevelopment – Describes the Port's program to reduce pollution in storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre
 - Pollution Prevention / Good Housekeeping for Municipal Operations – Describes efforts by Port maintenance staff to reduce pollutants in storm water runoff from

Port properties such as parks and corporation yards, and activities including street cleaning, catch basin cleaning, and integrated pest management

IV Glossary – Agency names, acronyms, and short names / Terms defined in the General Permit

V References – Cited and uncited reports and plans / Internet Resources

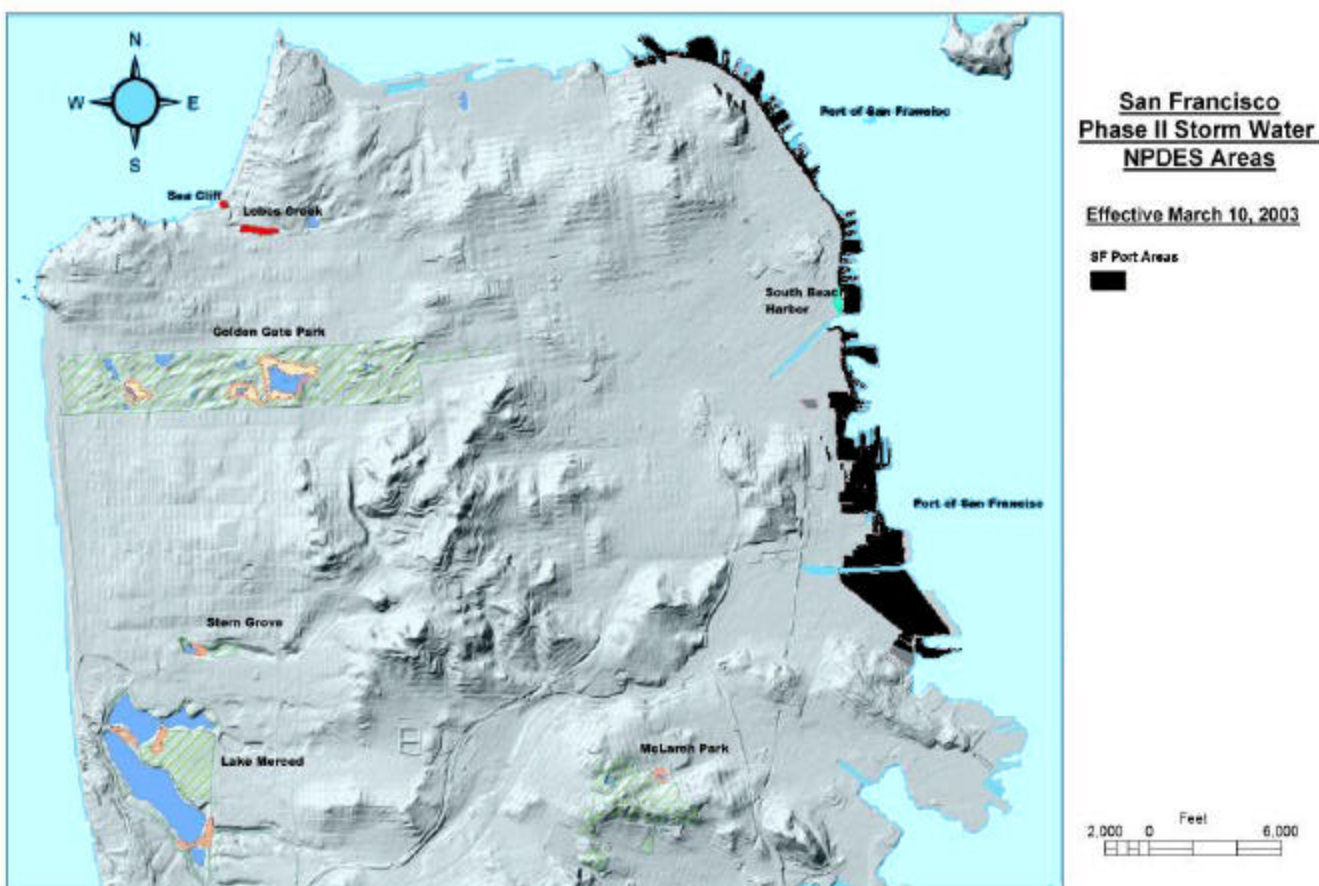
CHAPTER II BACKGROUND

2.1 Port Jurisdiction

San Francisco watersheds drain to both San Francisco Bay and the Pacific Ocean, as well as to various lakes within the geographic boundaries of the City. The health of these waters is aesthetically and economically important to San Francisco. San Franciscans swim, fish, surf, and sail on the Bay and ocean. These two water bodies define the City's location, are important to our economy, and are essential to our quality of life.

The Port of San Francisco manages approximately 7¹/₂ miles of San Francisco's waterfront, bracketed by Hyde Street Pier on the north and India Basin on the south. The Port and other City separate storm sewer system areas currently subject to the Phase II municipal General Permit are shown in Figure 2.

Figure 2: Port of San Francisco Phase II NPDES Area



Other San Francisco Phase II NPDES areas are shown with green crosshatch. Storm water management activities in these areas will be administered through the San Francisco Public Utilities Commission.

While the majority of the Port is served by separate sanitary and storm drain systems, there are locations where storm water is discharged to the City's combined sewer system, including:

- Upland areas of Fisherman's Wharf between Pier 39 and Hyde Street Harbor (excluding Pier 45);
- The southwest edge of South Beach Harbor parking lot at Pier 40, abutting the Embarcadero;
- The majority of Pier 70 extending from the foot of 20th street to the Port's property line on Illinois Street;
- Parcels adjacent to 21st, 22nd, 23rd, and 24th Streets, east to the Port's property line on Illinois Street;
- Pier 80 west of the entrance to the container terminal at the foot of Cesar Chavez Street;
- The Darling Delaware facility at Pier 92, with the exception of two drains near the northeast corner of the leasehold;
- Cargo Way, with the exception of the Amador Street entrance at Pier 90.

Port staff is currently in the process of finalizing a utility map that will provide a clear delineation between areas draining to separate storm sewers and areas draining to the combined sewer system. The current draft of this utility map is included as Appendix F of this report. Completion of the map is identified as a programmatic goal for the coming year.

The San Francisco Public Utilities Commission (SFPUC) manages storm water discharges to the City's combined sewer system through its Pollution Prevention Program. The SFPUC also administers two NPDES permits for its sewage treatment facilities and their appurtenant wet weather facilities. Each of these permits includes provisions for the management of storm water discharges to the combined sewer system.

2.2 Chronology of Port's Storm Water Program

The Port of San Francisco initiated its existing storm water management program in 1992 when Port and San Francisco Department of Public Works staff completed a survey of Port facilities to identify those that would be subject to provisions of the Industrial General Permit⁹. The Port advised operators of those facilities of their responsibilities under the Industrial General Permit through a series of letters, and hosted workshops to assist Port tenants in understanding and complying with the new regulations.

2.2.1 Port Group Storm Water Monitoring Program (1993)

The Port established its Group Storm Water Monitoring Program (GMP) in 1993, soliciting all tenants regulated by the Industrial General Permit for participation. The program was structured so that each group member maintained responsibility for:

- i) Visually inspecting storm water discharges at its facility monthly during wet weather to identify potential sources of storm water contamination and observe water quality;

⁹ The Statewide General Permit for Discharges of Storm Water Associated with Industrial Activities (Industrial General Permit) was adopted by the California State Water Resources Control Board in response to requirements of the USEPA Phase I storm water regulations. The Industrial General Permit targets specific industries whose activities have the potential to contaminate storm water runoff.

- ii) Visually inspecting its facility quarterly to identify authorized and unauthorized non-storm water discharges;
- iii) Inspecting its facility annually to evaluate the efficacy and implementation of storm water pollution prevention practices;
- iv) Submitting annual reports to the Regional Water Quality Control Board (RWQCB), with copies to Port.

The Port is responsible for conducting storm water sampling and analysis, evaluating data, and preparing and submitting the *Group Monitoring Program Annual Report* on behalf of participating tenants. The Port also reviews each group member's *Storm Water Pollution Prevention Plan* (SWPPP), and performs inspections at each facility to confirm implementation of best management practices¹⁰.

In 1996, Regional Board staff reviewed the Port's program and inspected tenants' facilities at the Port's request. Regional Board staff approved the Port's program, with the condition that it be limited to similar industries, and that other types of facilities be required to monitor their storm water individually. The program was revised at that time to include Port and tenant facilities whose operations would be characterized as maritime and/or maintenance.

Since inception of its storm water program, the Port has constructed facilities to support the commercial fishing industry in San Francisco, and has actively promoted fishing and related industries along the northern waterfront. During the past several years the Port has revised its program to include fish handling facilities¹¹. The Port's current program includes fifteen maritime operations and maintenance facilities and two fish processors. The Port submits updates to this program to the Regional Board in August of each year. The Port maintains on file annual monitoring reports for each member of its Monitoring Group.

2.2.2 Port Storm Water Management Program Update (2000-01)

The uses and operators at Port facilities have changed significantly since the Port's initial efforts in 1992 to identify all of the operations requiring coverage under the Industrial General Permit. During 2000-2001 a comprehensive survey was performed to produce an updated inventory of facilities and operations within Port jurisdiction that were required to seek coverage under the Statewide Industrial Permit.

To identify facilities subject to the industrial storm water regulations, the Port developed a screening process that allowed the Port to methodically categorize approximately 600 Port leases into facility or discharge types. The screening process identified 47 "known storm water facilities" – facilities subject to the Industrial General Permit because of their primary or industrial activity Standard Industrial Classification (SIC) code. Thirty-four of these 47 facilities were "Full" General Permit facilities – facilities required to comply with all aspects of the Industrial General Permit including submittal of an Notice of Intent (NOI), preparation of a SWPPP, and monitoring.

¹⁰ The SWPPP is a facility plan prepared with the goal of (1) helping identify pollutants that affect the quality of storm water discharges and (2) describing and ensuring the implementation of Best Management Practices (BMPs) to reduce or eliminate pollutants in storm water.

¹¹ Some fish processors at Pier 33 and Pier 45 have chosen to administer a group monitoring effort independent of the Port.

In the latter half of 2001, Port consultants visited these facilities and promoted storm water pollution prevention through operational controls including:

- notifying operators of their regulatory status and how the storm water regulations apply to their activities;
- explaining requirements for compliance;
- providing information on management measures; and
- assisting facility operators in developing training that they would give to their employees.

Facility inspection forms were filled out including detailed comments. Information from the inspections was compiled to a spreadsheet for recording and tracking purposes. During this same time, the Port developed a SWPPP for its new Hyde Street Commercial Fishing Harbor facility and revised the SWPPP for its Pier 50 D facility.

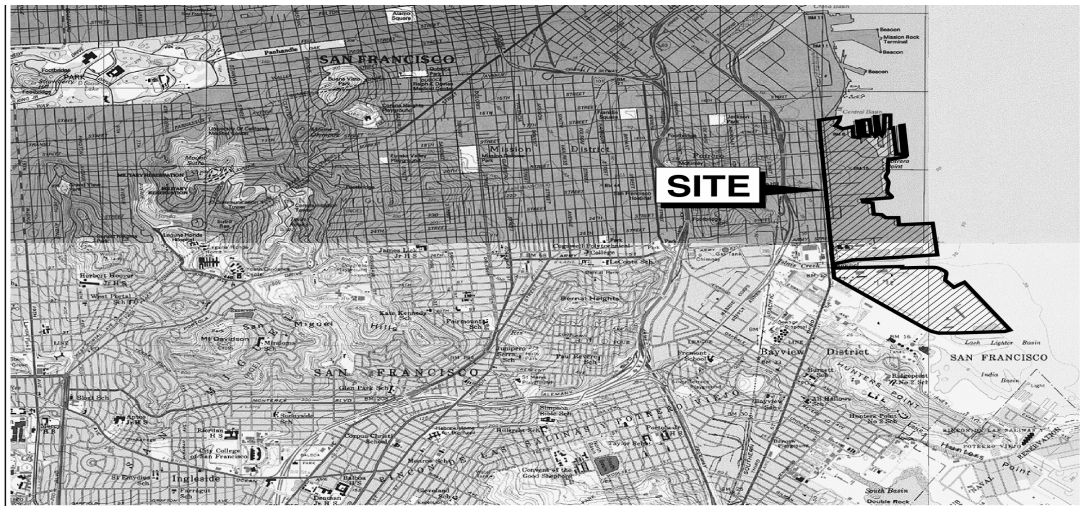
2.2.3 Southern Waterfront Storm Water Management Study (2001-2003)

The Port of San Francisco is planning for development and redevelopment of the Southern Waterfront Area of San Francisco, which extends from Pier 70 south to Pier 96 (see Figure 3). As part of its planning effort, the Port completed in February 2001 the Southern Waterfront Supplemental Environmental Impact Report (SEIR), which analyzed the environmental effects of a variety of proposed land uses and potential future development scenarios. The SEIR analyzed potential impacts on water quality of the Bay, taking into account anticipated changes in the quantity and quality of storm water runoff from new development proposed along the Southern Waterfront.

Subsequent to completion of the SEIR, community stakeholders expressed interest in developing an area-wide storm water management strategy for redevelopment of the Southern Waterfront, focusing on natural-systems based storm water management approaches. Natural-systems based storm water management techniques incorporate the use of bioretention areas, vegetated swales and seasonal wetlands along with other more traditional storm water management approaches such as smart site design and treatment. The Port's Southern Waterfront lends itself to this approach due to the large size and contiguous nature of the property (the Southern Waterfront includes the largest parcel of undeveloped property within the Port's jurisdiction). The Port responded to the community's concerns by commissioning a storm water planning study for the Southern Waterfront. The Southern Waterfront Storm Water Management Study (SWSMS), completed in spring 2003, includes the following:

- 1) An analysis of existing and proposed conditions along the Southern Waterfront;
- 2) A survey of regulations associated with the management of storm water runoff;
- 3) A survey of current technologies for managing and treating storm water runoff; and
- 4) A proposed concept for a natural-based systems approach for managing storm water in the Southern Waterfront Area, along with identification of various constraints associated with the proposed approach.

The SWSMS is a major element in the development of the Port's post-construction controls strategy. Port staff is now using the SWSMS as a reference when reviewing proposed development along the Southern Waterfront, and has conditioned a number of projects subject to the recommendations therein. The SWSMS is included in the SWMP as Appendix A.



Base map: TOPO! Wildflower Productions
San Francisco County
1997

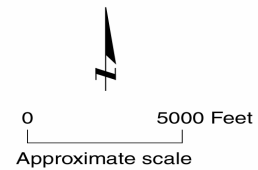


Figure 3: Port of San Francisco Southern Waterfront Planning Area

2.2.4 Port-wide Engineering Controls Technical Memorandum (2003)

In response to a information request by the RWQCB in October 2000, the Port contracted a study evaluating storm water management practices at a number of the tenant operations visited during the 2000-2001 Port storm water management program update. The goals of this study were to:

- 1) Identify and prioritize potential and observed impacts to water quality from Port facilities;
- 2) Determine when and if structural controls are appropriate at Port facilities;
- 3) Describe the site-specific applicability and effectiveness of available control technologies;
- 4) Perform a cost analysis of proposed engineering controls.

The Port is implementing recommendations made in the 2003 Engineering Controls Memorandum on a prioritized basis. Actions proposed pursuant to recommendations of the Engineering Controls Memorandum are included in Chapter III as part of the discussion of Illicit Discharge Detection and Elimination. The Engineering Controls Memorandum is included as Appendix B of this report.

CHAPTER III

PROGRAM ELEMENTS

3.1 Program Administration

3.1.1 Program Structure

The Port of San Francisco is uniquely positioned to administer the requirements of the Phase II storm water regulations. The Port manages and maintains jurisdiction for all of the property it is required to regulate, and can control the actions of its tenants and contractors through lease and contract provisions, or through Port Building Inspection staff, which exercises enforcement authority independent of other City departments. The Port is in effect a small municipality, overseeing all functions necessary for effective implementation of the SWMP including:

- **Engineering:** The Port Engineering Section oversees design and construction of Port infrastructure projects and reviews and approves proposed tenant improvements through a building permit process. Port Engineering includes Building Inspection and Construction Management staff who will be responsible for overseeing provisions of the Construction Site Storm Water Runoff Control element of the SWMP. Port Engineering staff will also assist in overseeing implementation of post-construction storm water controls.
- **Planning:** The Port's Planning Section administers land use planning and development, and is responsible for preparing environmental impact studies for waterfront development projects. Port Planning will coordinate with all Port divisions to ensure that all new projects along the waterfront are reviewed for applicability of construction and post-construction storm water controls. In addition, the Planning Section administers most of the waterfront citizen advisory committees that will be targeted under the Public Participation element of the SWMP.
- **Environmental Health and Safety:** The Port Environmental Health and Safety Section (EH&S) will serve as administrative lead for the Port's Storm Water Management Program. EH&S staff will liaison with RWQCB staff, develop a programmatic budget, manage the work of consultants, coordinate the work of other Port sections, perform field inspections, reporting and enforcement, and assist the Planning and Engineering Sections in project review. Port EH&S staff will also administer the Illicit Discharge Detection and Elimination and Public Education elements of the SWMP.
- **Maintenance:** The Port Maintenance Section performs maintenance, repair and construction of Port infrastructure. The Maintenance Section will be responsible for administering provisions of the Pollution Prevention/Good Housekeeping for Municipal Operations, including reporting on street sweeping, catch basin cleaning, illegal dumping and pesticide use. The Maintenance Section also administers the SWPPP for the Port's maintenance yards at Piers 50 and 90, and performs routine facility inspections at these locations.
- **Maritime:** The Port's Maritime Section manages the commercial fishing harbor at Hyde Street Pier, and is responsible for overseeing the activities of tenants at this location. In addition, the Maritime Section manages leasing activities for Port maritime tenants along the waterfront, including ferry, cruise ship, harbor services, cargo, commercial fishing and drydock operations. The Maritime Section is responsible for administering the SWPPP at

Hyde Street Harbor, and will assist in administering the Public Education and Illicit Discharge and Elimination elements of the SWMP.

- **Real Estate:** The Port's Real Estate section administers all non-Maritime leases along the waterfront, and is responsible for enforcing the provisions of Port leases, including environmental conditions. Port Real Estate will assist in administering the Public Education and Illicit Discharge Detection and Elimination elements of the SWMP.
- **City Attorney:** The Port City Attorney will assist in developing necessary amendments to the Port's building code, and will coordinate with the SFPUC City Attorney in review of the City's administrative code to ensure legal authority for the following minimum control measures:
 - D.2.c.3 – Illicit Discharge Detection and Elimination
 - D.2.d.1 – Construction Site Storm Water Runoff Control
 - D.2.e.3 – Post-Construction Storm Water Management in New Development and Redevelopment

If the City Attorney's office determines that changes are necessary and achievable, it will work with the Port, SFPUC and appropriate City departments to develop the proposed changes for consideration and adoption by the San Francisco Board of Supervisors or the San Francisco Port Commission.

3.1.2 Record Keeping and Reporting

Port EH&S staff will work with other Port divisions to develop standardized record keeping and reporting mechanisms to facilitate internal program tracking and evaluation, as well as external reporting to the Regional Board. Development of efficient record keeping procedures has been included as a measurable goal for several of the minimum control measures.

3.1.3 Budget

The Port has made funds available in fiscal years 2002-2003 and 2003-2004 to support the development and completion of the SWMP and the rest of the General Permit application.

Program Element	FY 2002-2003	FY 2003-2004
1. Program Development/Program Management		
Storm Water Technical Controls Memorandum	\$27,200	
SWMP Development	\$50,000	\$40,000
2. Public Outreach	\$30,000	\$15,000
3. Storm Sewer Mapping	\$37,900	\$16,000
4. Storm Water Sampling and Analysis	\$22,200	\$25,000
5. Waterfront Recycling Efforts	\$52,500	\$52,500
6. Heron's Head Park Environmental Education	\$50,000	\$50,000
7. Vactor Truck		\$250,000
8. BMP Maintenance – Characterization for Disposal		\$2,900
	\$269,800	\$451,400

3.2 Current and Planned Administrative Milestones

The Port of San Francisco will be the lead agency in developing and implementing the Phase II Storm Water Management Plan for MS4 areas of the San Francisco waterfront administered by the Port, including South Beach Harbor. Port EH&S staff performed the following activities during the 2002-2003 fiscal year to prepare for implementation of the SWMP:

- Reviewed the status and content of current Port activities against the requirements of the Municipal General Permit and guidance documents provided by the USEPA and RWQCB;
- Gathered and organized information on current Port and City policies, programs and projects that satisfy requirements of the six major elements of the Municipal General Permit;
- Identified additional activities required to satisfy requirements of the Municipal General Permit;
- Developed Fact Sheets for various Port divisions explaining requirements of the Phase II storm water regulations, and their likely impact on Port policies, procedures and operations;
- Met with Port division managers to discuss program responsibilities, staffing and reporting;
- Established interdepartmental coordination with San Francisco Department of Environment and San Francisco Department of Public Health;
- Coordinated with staff at San Francisco Redevelopment Agency to establish programmatic oversight at South Beach Harbor;
- Completed the Port-wide Storm Water Management Plan Engineering Controls Technical Memorandum;

In fiscal year 2003-2004 Port staff will:

- Enter into a Memorandum of Understanding with the SFPUC for interdepartmental coordination on storm water management issues;
- Establish an interdivisional management committee within the Port to coordinate administration of SWMP minimum control measures;
- Provide one presentation to the Port Commission about the requirements of the Port's storm water management program;
- Further refine roles and responsibilities, lines of communication, and decision making through the interdivisional management committee;
- Become a member of the California Storm Water Quality Association (CASQA);
- Implement activities planned for each of the SWMP minimum control measures;

- Develop an early identification system through the Port's Real Estate Department, which will inform the Environmental Health & Safety (EH&S) group of changes in leaseholders and prompt EH&S staff to assess their regulatory status. Tenants will be notified of their regulatory status accordingly, and provided assistance with regulatory compliance;
- Coordinate with SFPUC staff to establish narrative and formatting consistency between Port and SFPUC SWMPs.

3.3 Minimum Control Measures/ Measurable Goals

The Federal Phase II storm water regulations and the State municipal General Permit require that a Storm Water Management Program include the following six elements or “minimum control measures.”

1. Public Education and Outreach on Storm Water Impacts
2. Public Involvement / Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Storm Water Runoff Control
5. Post-Construction Storm Water Management in New Development and Redevelopment
6. Pollution Prevention / Good Housekeeping for Municipal Operations

The SWMP must describe the best management practices, schedules of implementation, and associated “measurable goals” that will fulfill specific regulatory requirements for each of the minimum control measures. The Port and the Regional Board will use measurable goals to evaluate the effectiveness of individual control measures and the Storm Water Management Program as a whole. Both the Federal regulations and the State General Permit are written with the assumption that timely and effective implementation of best management practices will protect water quality, and constitutes compliance with the standard of reducing pollutants to the maximum extent practicable. Table 3 lists the targeted audience for each control measure.

Table 3: Primary Audiences for the BMPs in Each Element

Element	Public	Businesses/ Tenants	Contractors / Developers	Municipal Employees
Public Education and Outreach on Storm Water Impacts	e	e		
Public Involvement / Participation	e	e		
Illicit Discharge Detection and Elimination	e	e		e
Construction Site Storm Water Runoff Control	e		e	e
Post-Construction Storm Water Management in New Development and Redevelopment	e	e	e	e
Pollution Prevention / Good Housekeeping for Municipal Operations	e			e

Continuous Improvement

The BMPs and measurable goals described in this SWMP are not set in stone. They represent the best efforts of Port staff to identify at the outset of the program goals that will comply with the Phase II regulatory mandate, while at the same time acknowledging the desires and goals of the Port's stakeholder community. However, the concept of "maximum extent practicable" evolves over time. Through a *continuous improvement process*, the Port will continue to develop and implement reasonable control measures to help advance the goal of achieving water quality objectives. The Port will review the goals associated with each of the minimum control measures on an annual basis, revising and refining them as the program develops. The Port will continue coordination with its stakeholder community, and continues to welcome input that will help improve storm water management along the San Francisco waterfront.

3.4 Program Contacts

The contact information for the person(s) responsible for implementing activities described for each of the minimum control measures is listed in Table 4 on page 20. Table 4 also includes key contacts for RWQCB staff providing state oversight for various elements of the Port's program.

3.5 Information Sheets

The State General Permit lists about 20 specific regulatory requirements across the six minimum control measures. For each minimum control measure, a cover sheet is provided that lists the Port coordinator for that measure and provides an overview of Port's approach. Following each of the six cover sheets is a series of one or more information sheets organized by the specific regulatory requirements. Each information sheet provides the following:

- Element name
- General Permit section
- Regulatory requirement (excerpted verbatim from the General Permit)
- Existing efforts including BMPs, and roles and responsibilities. Except for one-time efforts, existing efforts will continue during the 2003-2004 fiscal year.
- Planned efforts including BMPs, and roles and responsibilities. Unless otherwise noted, planned efforts are scheduled for initiation during the 2003-2004 fiscal year.
- Measurable goals

Table 4: San Francisco Storm Water Program Contact Persons

Minimum Control Measure	Port Contact(s)	Phone/ e-mail	e-mail	SFPUC Contact	Phone	e-mail
Public Education and Outreach on Storm Water Impacts	John Mundy	415.274.0256	john.mundy@sfport.com	Karen Hurst	(415) 695-7340	Khurst@sflower.org
Public Involvement / Participation	John Mundy David Beaupre	415.274.0256 415.274.0539	john.mundy@sfport.com david.beaupre@sfport.com	Karen Hurst	(415) 695-7340	Khurst@sflower.org
Illicit Discharge Detection and Elimination	John Mundy	415.275.0256	john.mundy@sfport.com	Karen Hurst	(415) 695-7340	Khurst@sflower.org
Construction Site Storm Water Runoff Control	John Mundy Brad Wilson	415.274.0256 415.274.0679	john.mundy@sfport.com brad.wilson@sfport.com	Karen Hurst	(415) 695-7340	Khurst@sflower.org
Post-Construction Storm Water Management in New Development and Redevelopment	David Beaupre	415.274.0539	david.beaupre@sfport.com	Karen Hurst	(415) 695-7340	Khurst@sflower.org
Pollution Prevention / Good Housekeeping for Municipal Operations	Tom Petersen	415.597.7904	tom.petersen@sfport.com	Karen Hurst	(415) 695-7340	Khurst@sflower.org
Other Local Agencies						
SFPUC Bureau of Environmental Regulation and Management	Main	415.695.7310	Issues permits for industries discharging to sanitary sewer; investigates illicit discharges to the sanitary sewer, and to storm drains outside Port jurisdiction.			
San Francisco Department of Public Health	Main	415.252.3800	Issues hazardous materials use permits; investigates illicit discharge and disposal of hazardous materials.			
RWQCB Program	RWQCB Contact	Phone	e-mail			
Municipal Storm Water Program	John West	510.622.2438	jrw@rb2.swrcb.ca.gov			
Industrial Storm Water Program	Vic Pal	510.622.2403	vp@rb2.swrcb.ca.gov			
Construction Storm Water Program	Mark Johnson	510.622.2493	mej@rb2.swrcb.ca.gov			

3.5.1

Minimum Control Measure: Public Education and Outreach on Storm Water Impacts

Coordinator: John Mundy

Overview: The Port of San Francisco administers an active tenant outreach effort through its Industrial Storm Water Program. The Port regularly inspects tenant facilities, providing storm water training materials and assistance in reporting and other compliance related activities. Efforts to promote pollution prevention at tenant facilities have paid off in the past year, with two Port tenants, Blue and Gold Fleet and Westar Marine, being among the first City businesses to receive recognition under San Francisco's "Clean and Green" program. During the next two years, Port staff will expand outreach efforts to target restaurants operating at Fishermen's Wharf and construction contractors operating along the Port waterfront. Other future outreach efforts currently under consideration include houseboat residents along Mission Creek and members of the Bayview and Mariposa Boat Clubs.

Harbors at Hyde Street and South Beach Piers include postings educating fisherman and recreational boaters about the proper management of bilge water, sewage and other hazardous materials. In 2002, the Port completed storm drain stenciling efforts at its Pier 50 maintenance yard and the Pier 45 fish processing facility. All storm drains along the Port's waterfront discharging directly to the Bay will be stenciled during the first cycle of the Municipal General Permit.

The Port partners with the non-profit group Literacy for Environmental Justice (LEJ) to provide quality environmental education opportunities at Heron's Head Park at Pier 98. During fiscal year 2002-2003, over 1800 students from Bay area public school and volunteers from local businesses and non-profits received training in habitat restoration, performed water quality monitoring, and cleaned up litter and debris along the Southern Waterfront shoreline. LEJ programs at Heron's Head Park have recently been recognized with two prestigious awards; the National Clearwater Award presented by the Waterfront Center, and the Friends of San Francisco Estuary award for community participation.

(For more information, see following Information Sheet - Minimum Control Measure)

3.5.1

A. Element name: Public Education and Outreach on Storm Water Impacts - Program

General Permit section: D.2.a

Regulatory requirement

“The Permittee must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.”

Existing efforts

During the past several years, Port staff has committed significant resources educating tenants about storm water regulations. Outreach efforts include a 2000-2001 tenant facility survey, development of educational postings at Port harbors, and initiation of a waste oil recycling effort targeting commercial and recreational boaters. By partnering with local non-profits, the Port has expended its outreach to include local schools, other non-profits and visitors to the waterfront. The cornerstones of public outreach at the Port now include:

- Community events (e.g., Earth Day, Coastal Cleanup Day)
- Business education and partnerships
- Schools program (through a partnership with LEJ)

After publishing its Initial SWMP in March 2003, the Port (in concert with the SFPUC) embarked on a public outreach effort targeting stakeholders along the Port's waterfront. The Port now has a database of more than 500 stakeholders, including Port tenants, local construction contractors, neighborhood groups, environmental groups, regulatory agencies, and local government officials. In June 2003, the Port and SFPUC mailed a fact sheet to these stakeholders, and hosted four public meetings and two stakeholder workshops during summer 2003. Details on these workshops are provided in the discussion of Public Involvement in Section 3.5.2.

Planned efforts

Existing efforts will continue during the 2003-2004 fiscal year. The Port's public education and outreach on storm water impacts will expand during the first cycle of the municipal permit to include the following efforts:

- Task 1: Port staff will create at least one Fact Sheet a year updating the public on efforts to develop and implement the Port's Storm Water Management Program (FY 2003-2008)

Information Sheet - Minimum Control Measure

- Task 2: Port staff will a post and maintain a storm water outreach page on the Port website. Web-based outreach efforts will be developed in FY 2004-2005 and beyond (FY 2004-2005).
- Task 3: Port staff will host an Earth Day event at Fisherman's Wharf in coordination with Blue and Gold Fleet and other City departments. The event will promote pollution prevention awareness in visitors to the Wharf (FY 2004-2005)
- Task 4: Port staff will create community and business outreach/education campaigns to address targeted storm water pollutants. During fiscal years 2003-2004 and 2004-2005, the Port will specifically target construction operators and restaurants in the Fisherman's Wharf area. In future years, Port staff will target commercial fishermen for hazardous materials awareness and non-point pollution control. An update of targeted outreach goals will be included in the 2003-2004 annual report. (FY 2003-2004 through FY 2007-2008).
- Task 5: Port staff will work with LEJ to develop a storm water training module for the LEJ public school training curriculum. (FY 2004-2005)
- Task 6: Port staff will facilitate additional public involvement activities such as marking catch basins with a storm water pollution prevention message. (FY 2004-2005 through FY 2007-2008)
- Task 7: The Port will evaluate the effectiveness of its public outreach program annually, starting at the end of fiscal year 2004-2005. Program evaluation will include:
- a summary of efforts completed for the current fiscal year
 - a review of the Port stakeholder database to ensure contact information is current
 - phone surveys of targeted stakeholders
 - proposed revisions to public outreach program based on evaluation
- During fiscal year 2003-2004, the Port will complete a technical memorandum detailing evaluation methodology. The technical memorandum will be included in the annual report for FY 2003-2004.

Information Sheet - Minimum Control Measure

3.5.1.B Measurable goals

The following measurable goals and timetables for implementation have been developed with public involvement for the BMPs and activities shown for this element of the Public Education and Outreach on Storm Water Impacts minimum control measure.

Element Name	BMP / Activity and Significant Subactivities (indented)	MS4 Area	Responsible Agency(s)	Measurable Goal	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
Public Education and Outreach on Storm Water Impacts (Audience = General Public)										
Program (General Permit sec. D.2.a)	Storm Water Program Fact Sheets	Port	Port	One Fact Sheet per year, distributed to at least 500 waterfront stakeholders.	X	X	X	X	X	X
	Web-based education and outreach	Port	Port	FY 04-05 : Complete website FY 04-08: Number of visitors / unique visitors; Number / type of requests			X	X	X	X
	Earth Day Public Outreach Event	Port	Port	Number of outreach brochures distributed.			X			
	Targeted Outreach Campaigns			FY 03-04 and FY 04-05: Pollution prevention outreach to construction operators and Fisherman's Wharf restaurants. FY 05-08: Goals updated annually in workplan submittal to RWQCB.		X	X	X	X	X
	LEJ Public School Training Curriculum	Port	Port	FY 04-05: Complete training module FY 05-08: Provide training to 200 students annually			X	X	X	X
	Catch Basin Stenciling	Port	Port	Stenciling of all Port storm drains by FY 07-08. Actual number stenciled to be determined pending completion of Port storm sewer mapping effort in FY 03-04. Goals updated annually in workplan submittal to RWQCB.			X	X	X	X
	Public Outreach Program Evaluation	Port	Port	FY 03-04: Program evaluation methodology memo. FY 04-08: Annual summary report of programmatic efforts, stakeholder survey, database review. Comparison of results versus goals for each BMP		X	X	X	X	X

3.5.2

Minimum Control Measure: Public Involvement / Participation

Coordinator: Planning: David Beaupre EH&S: John Mundy

Overview: The Port coordinates on environmental issues with a number of public advisory, stakeholder, and citizen volunteer groups, including those listed below. The Port will continue to work with these groups to ensure that San Francisco citizens are informed about and have the opportunity to participate in the development and implementation of the Port's storm water program. In addition, the City has a law – the Sunshine Ordinance – that prescribes how City business will be conducted before the public.

Advisory Groups

- Brannan Street Wharf Citizens Advisory Committee
- Ferry Building Waterfront Advisory Group
- Fisherman's Wharf Environmental Quality Advisory Group
- Fisherman's Wharf Waterfront Advisory Group
- Maritime Commerce Advisory Committee
- Northeast Waterfront Advisory Group
- Pier 70 Advisory Group
- Southern Waterfront Advisory Committee
- Waterfront Design Advisory Committee
- Cruise Ship Terminal Air and Water Quality Advisory Committee

Stakeholder Groups

- BayKeeper
- The Alliance for a Clean Waterfront
- Bayview Hunters Point Community Advocates
- Literacy for Environmental Justice
- Audubon Society

(For more information, see following Information Sheet - Minimum Control Measure)

3.5.2

A. Element name: Public Involvement / Participation - Noticing

General Permit section: D.2.b

Regulatory requirement

“The Permittee must at a minimum comply with State and local public notice requirements when implementing a public involvement/participation program.”

Existing efforts

The City's Sunshine Ordinance (Chapter 67 of the San Francisco Administrative Code) assures that deliberations are conducted before the people and that City operations are open to public review. The Sunshine Ordinance Task Force exists to provide information on rights under the Ordinance and for reporting violations. The Port complies with all State public notice requirements as well as the requirements contained in the City of San Francisco Sunshine Ordinance.¹²

Port and SFPUC staff developed a work plan that complied with provisions of the public involvement component of the Phase II General Permit. During the time between the submittal of the *Initial* SWMP (CCSF, 2003a) in March and submittal of the *Final* 2003-2004 SWMP, SFPUC and the Port made presentations and facilitated discussions at the following meetings:

- June 4 – Northeast Waterfront Advisory Group
- June 17 – Fisherman's Wharf Waterfront Advisory Group
- June 18 – Southern Waterfront Advisory Committee
- July 31 – Fisherman's Wharf Environmental Quality Advisory Committee
- July 24 – Northern waterfront stakeholder workshop
- August 26 – Bayview Hunters Point stakeholder workshop

At the advisory committee meetings, the *Initial* SWMP was presented and reviewed, and comments solicited from the participants. Comments to the *Initial* SWMP and programmatic measurable goals were discussed at the July 24 and August 26 workshops. Appendix C includes the fact sheets and Powerpoint presentations used at these meetings. Appendix D provides a summary of comments received from the public during the workshops and outreach

¹² San Francisco Administrative Code Section 67.7-1, Public Notice Requirements:

- (a) Any public notice that is mailed, posted or published by a City department, board, agency or commission to residents residing within a specific area to inform those residents of a matter that may impact their property or that neighborhood area, shall be brief, concise and written in plain, easily understood English.
- (b) The notice should inform the residents of the proposal or planned activity, the length of time planned for the activity, the effect of the proposal or activity, and a telephone contact for residents who have questions.
- (c) If the notice informs the public of a public meeting or hearing, then the notice shall state that persons who are unable to attend the public meeting or hearing may submit to the City, by the time the proceeding begins, written comments regarding the subject of the meeting or hearing, that these comments will be made a part of the official public record, and that the comments will be brought to the attention of the person or persons conducting the public meeting or hearing. The notice should also state the name and address of the person or persons to whom those written comments should be submitted. (Added by Ordinance 185-96, App. 5/8/96; amended by Proposition G, 11/2/99)

Information Sheet - Minimum Control Measure

meetings held in the summer of 2003. This Final 2003-2004 SWMP reflects input from those meetings specific to MS4 areas owned by Port.

Planned efforts

Except for one-time efforts, current activities will continue during the 2003-2004 fiscal year. The Port's plan for continuing public involvement is divided into two main areas:

Task 1: Meetings – Port staff will provide semi-annual programmatic updates to the following advisory groups:

- Fisherman's Wharf Waterfront Advisory Committee
- Fisherman's Wharf Environmental Quality Advisory Committee
- Southern Waterfront Advisory Committee
- Northeast Waterfront Advisory Committee
- Pier 70 Advisory Committee

As necessary or requested, Port staff will make presentations to these and other waterfront advisory committees and stakeholder groups. Public involvement materials will continue to include items such as Power Point presentations for meetings and workshops, as well as fact sheets (including translations in Spanish and Chinese, as needed). Program plans and reports will also be shared and discussed with interested stakeholders.

Task 2: The Fisherman's Wharf Environmental Advisory Committee (EQAC) has expressed interest in participating in program development efforts targeting Fisherman's Wharf. During FY 2004-2005, Port staff will work with EQAC to develop an area plan for storm water management at Fisherman's Wharf between Piers 41 and Hyde Street Harbor.

Information Sheet - Minimum Control Measure

3.5.2.B Measurable goals

The following measurable goals and timetables for implementation have been developed with public involvement for the BMPs and activities shown for this element of the Public Involvement/ Participation minimum control measure.

Element Name	BMP / Activity and Significant Subactivities (indented)	MS4 Area	Responsible Agency(s)	Measurable Goal	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
Public Involvement / Participation (Audience = General Public)										
Noticing (General Permit sec. D.2.b)	Storm Water Program Fact Sheets	Port	Port	One Fact Sheet per year to a minimum of 500 Port waterfront stakeholders	X	X	X	X	X	X
	Workplan Development	Port/SFPUC	Port/SFPUC	Workplan by spring 2003, with annual summary and updates	X	X				
	Outreach Database Development	Port/SFPUC	Port/SFPUC	Draft database by June 2003, with annual revisions	X	X	X	X	X	X
	Outreach Materials Development	Port/SFPUC	Port/SFPUC	Powerpoint presentations/fact sheets; number of presentations/fact sheets distributed						
	Initial SWMP									
	Initial SWMP – Existing advisory panel and interest group meetings	Port/SFPUC	Port/SFPUC	Number of meetings attended; Number of attendees; Summary of questions/comments	X	X				
	Initial SWMP – Information meetings with interested parties	Port/SFPUC	Port/SFPUC	Number of meetings held; Number of attendees; Summary of questions/comments		X				
	Initial SWMP – Final presentation meeting with interested parties	Port/SFPUC	Port/SFPUC	Number of attendees; Documentation of questions/comments/responses		X				
	Semi-Annual Advisory Group Updates	Port	Port	Semi-annual updates to 4 Port advisory groups.		X	X	X	X	X
	Coordination with EQAC	Port	Port	Workplan for targeted programmatic effort at Fisherman's Wharf.			X			
	Public Involvement Program Evaluation	Port	Port	Annual summary of public involvement activities. Annual update of public involvement workplan.		X	X	X	X	X

3.5.3**Minimum Control Measure: Illicit Discharge Detection and Elimination****Coordinator:** John Mundy**Overview:**

The Port of San Francisco currently administers an informal Illicit Discharge Detection and Elimination Program through its leasing program. All Port leases include provisions requiring that Port tenants comply with federal, state and local regulations. When an illicit discharge is found, Port Real Estate initiates enforcement of the lease provisions. Targeted discharges include sanitary waste, hazardous materials, wash water and construction related materials.

The Port of San Francisco waste oil recycling program, administered through a grant from the California Integrated Waste Management Board, collected more than 11,000 gallons of waste oil and other materials during fiscal year 2002-2003 that might otherwise have been disposed of to storm drains and local receiving waters. The bilge water collection facility at Hyde Street Harbor collected an additional 8,400 gallons of oily waste. Port maintenance staff collects thousands of pounds of illegally disposed solid waste and construction debris along the waterfront every year.

The Port will continue and expand its existing efforts to detect and eliminate illicit discharges, including sanitary waste discharges from recreational vehicles and tour buses, and illegal dumping along the waterfront. Based on comments received by the Fisherman's Wharf Environmental Quality Advisory Committee, Port staff will focus additional oversight on the housekeeping practices at Fisherman's Wharf restaurants. The Port will also coordinate with and report on recycling efforts at South Beach Harbor.

(For more information, see following Information Sheets - Minimum Control Measures)

3.5.3

A. Element name: Illicit Discharge Detection and Elimination - Program

General Permit section: D.2.c.1

Regulatory requirement

“The Permittee must develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at 40 CFR §122.26(b)(2)) into the regulated Small MS4.”

Existing efforts

The Port administers a number of efforts along the waterfront that contribute to the control of pollution to the Bay. These efforts include:

- Oil recycling – The Port encourages recycling of waste oil as part of its effort to reduce illegal dumping along San Francisco’s waterfront. Waste oil recycling stations have been located at Hyde Street Harbor and Fisherman’s Wharf. In addition, a bilge water pump out station is located at Hyde Street Harbor. These stations are inspected and maintained daily by Port staff. During the last reporting year, more than 11,000 gallons of waste oil and 8,400 gallons of bilge water were collected and disposed of from these stations. In addition, Port maintenance staff responds to illegal dumping activities at Port properties, and routinely disposes of debris and materials abandoned along the waterfront.
- Sewage pumpout - The Port operates sewage pumpout stations for commercial fishing boats berthed at the Hyde Street Harbor. San Francisco Redevelopment Agency is in the process of installing sewage pumpout stations at South Beach Harbor.
- Control of illegal dumping along the Port of San Francisco’s waterfront – In recent years, abandoned waste has become a serious issue along the Port’s waterfront. Port maintenance staff collects abandoned waste, which it consolidates for disposal at Pier 50 (hazardous substances) or Pier 90 (non-hazardous garbage and debris). Port maintenance staff is trained in the handling, transportation, and disposal of hazardous waste.
- Abandoned vessel recovery – Port Maintenance staff removes upwards of 10 abandoned boats a year from the waterfront using grant funding provided by the California Department of Boating and Waterways. The boats are stored along Piers 90-92 prior to disposal. No ship breaking occurs at these or other Port maintenance sites.

Emergency Response: Emergency response to spills and other incidents in San Francisco is coordinated among City, State and Federal agencies. Spills observed during working hours on Port property should be reported directly to Port Environmental Health and Safety staff. The Port has coordinated with other City agencies and the National Park Service to develop an Oil Spill Prevention and Response Plan that describes procedures to be taken in the event of an oil spill along the San Francisco waterfront. Port staff has received Oil Spill Response training, and maintains response equipment at its Hyde Street Harbor and Pier 50 facilities.

Hazardous materials releases that don’t involve a discharge to the Bay or other surface waters can be reported to Port EH&S, or to the San Francisco Department of Public Health Bureau of Environmental Health Management. Storm water pollution associated with industrial facilities and construction sites can be reported to the Regional Water Quality Control Board. Contact information for agencies involved in oil spill response, hazardous materials response, and storm water pollution response is provided below:

Table 5: Emergency Response Agencies and Contact Numbers

Agency	Contact	Phone
Port of San Francisco Environmental Health and Safety	Main	(415) 274-0256 or (415) 274-0400
	After Business Hours	(415) 695-2020
Regional Water Quality Control Board	Complaint Response	(510) 622-2369
California State Office of Emergency Services Warning Center	After Business Hours	(800) 852-7550
National Response Center	After Business Hours	(800) 424-8802
Department of Fish and Game Oil Spill Prevention and Response	After Business Hours	(916) 445-0045
U.S. Coast Guard Marine Safety Office	After Business Hours	(510) 437-3073
For Hazardous Materials Incidents not Involving a Discharge to the Bay or Creeks		
San Francisco Fire Department Hazardous Materials Team	Main/After Business Hours	(415) 558-3236
San Francisco Department of Public Health Bureau of Environmental Health Management	Main/ After Business Hours	(415) 252-3800

Facility Evaluation: In addition to the activities described above, the Port of San Francisco is already implementing an enhanced illicit discharge control program, the result of ongoing discussions between Regional Board and Port staff regarding storm water management controls at Port tenant facilities. In November 2000, the Port transmitted to the Regional Board its *Work Plan for Storm Water Discharge Evaluation* (Port, 2000a). The transmittal presented the Port's proposed work plan for completing a comprehensive survey of storm water and non-storm water discharges from Port-owned facilities.

Using the list of all Port facilities, sorted by location or operator name as a guide, Port staff or contractors visually surveyed all documented Port tenant operations. For each facility where potential industrial use could not clearly be defined (e.g., office building, parks), staff completed a Storm Water Survey Checklist and sketch of each facility to illustrate the presumed storm water runoff pattern based on visual observations and observed discharges.

For some facilities, additional investigation of the sewer lines to which storm water and non-storm water flows discharged was required. As necessary, Port staff reviewed existing utility plans and inspected sewer lines under piers to verify the presumed discharge locations of storm water runoff from industrial facilities. Staff used information from plan review and field inspection to revise preliminary facility maps, confirm non-storm water discharges, and determine whether or not facilities were connected to the combined sewer system.

The comprehensive survey, completed in June 2001, identified facilities and infrastructure in the Fisherman's Wharf area and beneath the Ferry Plaza as having potentially unauthorized non-storm water discharges. Non-storm water discharges included leaks from under-pier plumbing systems and effluent from flow-through holding tanks for live organisms. As these areas were discovered, Port maintenance staff conducted detailed inspections of the plumbing systems and made the necessary repairs. The Port continues to inspect infrastructure along San Francisco's waterfront as part of its ongoing capital improvements program.

Engineering Controls: Each of the Port tenants determined by the facility survey to be subject to the Industrial General Permit is required to implement best management practices based on facility-specific activities. To determine which BMPs were appropriate for each facility, the Port used the results of the June 2001 comprehensive survey to evaluate and recommend potential management measures that could be implemented at specific facilities in support of the Port-Wide Storm Water Management Program.

The Port ranked activities of concern at each of the facilities subject to the Industrial General Permit, and made recommendations for implementation of both source and treatment controls in an *Engineering Controls Technical Memorandum* (Port, 2003b). Potential management measures recommended in the memorandum include engineering controls, operational and housekeeping practices, and outreach and education. The Port will implement the recommendations of the *Engineering Controls Technical Memorandum* on a prioritized basis to ensure that available resources are used to implement the most effective remedies to control pollutants at facilities posing the greatest risk of impact to water quality.

Planned efforts

The Port will continue to respond to complaints or queries submitted by other agency staff or the general public regarding tenants' activities and/or discharges. Additional plumbing inspections will be completed as needed, to accurately characterize discharges and options for their management. The Port will report immediately to Regional Board staff information on leaks from under-pier plumbing systems that exceed the reportable quantity thresholds defined in Section 13271 of the California Health and Safety Code. Information on other leaks will be logged as they are identified and repaired, and reported to the Regional Board as part of the Storm Water Management Program annual report. Tenants will be notified of their regulatory status and responsibilities accordingly.

Following is a summary of additional tasks proposed for development, implementation and enforcement of the Port's Illicit Discharge Control Program:

- Task 1: Port staff will establish a hotline to receive reports of illicit discharges from the public (FY 2003-2004)
- Task 2: Port staff will notify the public through a fact sheet mailing (or other outreach tool) that a hotline has been established. The outreach goal is to notify all members of the current Port storm water stakeholder database, which includes 500 individuals, community groups and businesses. (FY 2003-2004).
- Task 3: Port maintenance staff will develop a protocol for tracking and reporting the collection and disposal of solid waste and other debris encountered along the Port waterfront (FY 2004-2005).

- Task 4: Port staff will expand the Port's recycling operation to locations at the San Francisco Marina and Treasure Island. Printed materials encouraging pollution prevention and recycling will be distributed at tenant berths at each location (FY 2003-2004).
- Task 5: In coordination with SFPUC, the Port will establish a formalized enforcement response protocol for illicit discharge reports (FY 2004-2005)
- Task 5: The Port will implement a program wherein areas of the waterfront that have become attractive nuisances for dumping are gated, and posted with signs warning the public that dumping is illegal (FY 2004-2005).
- Task 6: The Port will continue to conduct facility inspections for participants in the Port-wide Group Monitoring Program, in accordance with requirements of the General Industrial Permit. The Port will inspect other commercial and industrial tenants along the waterfront at least once during the first permit cycle (FY 2003-2008)

3.5.3

B. Element name: Illicit Discharge Detection and Elimination - Storm Sewer System Map

General Permit section: D.2.c.2

Regulatory requirement

"The Permittee must develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and locations of all waters of the U.S. that receive discharges from those outfalls."

Existing efforts

The City and County of San Francisco has been using Geographic Information Systems (GIS) within individual departments to enhance both operational and analytical functions since 1994. The Department of Public Works was the initial creator of spatial "basemap" information, including a sewer basemap. For the next five years DPW developed and maintained the City's basemap efforts. The City uses ESRI's ArcIMS product to share map information among city employees.

In November 2002, the Port of San Francisco contracted with the City's Department of Public Works to consolidate and digitize all of its existing utility maps into ArcIMS and AutoCAD formats. A draft electronic basemap of the Port's storm sewer system was completed in Spring 2003, with follow-up field investigations performed by Port and DPW staff during Summer 2003 to verify accuracy of the digitized map using smoke testing or dye testing. The primary goal of the proposed field investigations is to confirm the boundary between the City's combined sewer system and the Port's separate storm sewer system. A working draft of the Port's MS4 map in Acrobat format is included in Appendix C.

Planned efforts

Based on results from the continuing investigation and confirmation of MS4 areas owned by the Port described in section 2.2 above, Port staff will continue to update the City's basemap. As of September 2003, the Port has completed field investigations at Piers 90 through 96. The Port will complete investigations of the remainder of its MS4 during fiscal years 2003-2004 and 2004-2005. Following is a summary of tasks proposed as part of the storm sewer system mapping effort:

- Task 1: Complete field investigations of the Port MS4 area and submit a final map to RWQCB (FY 2003-2005)
- Task 2: Identify all General Industrial Permit facilities on City basemap (FY 2004-2005)
- Task 3: Port Engineering staff will incorporate as-built utility drawings from Port construction projects into City basemap within 6 months of completion (Ongoing, FY 2004-2008)

3.5.3

C. Element name: Illicit Discharge Detection and Elimination - Ordinance

General Permit section: D.2.c.3

Regulatory requirement

“The Permittee must, to the extent allowable under State or local law, effectively prohibit, through ordinance or other regulatory mechanism, non-storm water discharges into the MS4 and implement appropriate enforcement procedures and actions.”

Existing efforts

Chapter X of the San Francisco Municipal Code directs that all dischargers must comply with all state and federal orders issued to the City, including all of the City’s NPDES permits. The Municipal Code also prohibits the discharge of hazardous waste and other pollutants that would violate the City’s federal and state discharge permits.

All Port leases include provisions requiring Port tenants to comply with all federal, state and local laws and regulations.

Planned efforts

The City Attorney’s Office will review Chapter X of the San Francisco Municipal Code to ensure that the City’s authority includes the ability to effectively prohibit non-storm water discharges into MS4 areas and to implement appropriate enforcement procedures and actions. If that review determine changes are necessary and achievable, the City Attorney’s Office will work with the appropriate City departments to develop the proposed changes for consideration and adoption by the San Francisco Board of Supervisors.

- Task 1: City Attorney will review the San Francisco Municipal Code to ensure language that effectively prohibits non-storm water discharges to the separate storm sewer system. The City Attorney will draft a memorandum documenting review methods, results of review, and recommended changes. (FY 2003-2004)
- Task 2: Port staff will create a boilerplate lease and building permit that includes specific language requiring compliance with storm water regulations. (FY 2003-2004)

3.5.3

D. Element name: Illicit Discharge Detection and Elimination – Plan

General Permit section: D.2.c.4

Regulatory requirement

“The Permittee must develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to the system that are not authorized by a separate NPDES permit.”

Existing efforts

Based on reports from maintenance and EH&S staff, the Port is in the process of installing locking gates in areas of the waterfront where illegal dumping is a problem. All of Pier 90 to Pier 96 is now gated, and reports of dumping in this area have diminished considerably. Port staff is currently surveying other sites along the waterfront between Pier 50 and Pier 90 to determine other locations where gating may be necessary.¹³ Other current efforts directed at detection and elimination of non-storm water discharges are described in the “Existing efforts” section of the Information Sheet for General Permit section D.2.c.1 – Illicit Discharge Detection and Elimination – Program.

Planned efforts

In response to input from the Fisherman’s Wharf Environmental Quality Advisory Committee, Port staff will initiate an outreach and inspection effort specifically targeting tenant activities along the western end of Fisherman’s Wharf extending from Pier 41 to Hyde Street Harbor. Work on this outreach effort will commence once the drainage of storm sewers in the vicinity of Fisherman’s Wharf has been confirmed. Until a formalized program is developed, Port staff will continue waste drain inspections on a semi-annual basis in Fish Alley, adjacent piers, and waterfront facilities in the west end of Fisherman’s Wharf to identify and correct illegal discharges.

The Port’s plans for addressing non-storm water discharges along the entire Port waterfront are described in two existing plans and their related documents:

- *Draft Report and Implementation Plan, Port of San Francisco Port-Wide Storm Water Management Program* (Port, 2001) – This is the final report on the comprehensive survey of Port facilities performed in 2000-2001. The report includes an Implementation Plan that with information on BMPs, permitting, monitoring, and documentation and reporting.
- *Engineering Controls Technical Memorandum* (Olivia Chen Consultants, 2003a) – The Port will implement the recommendations of the Technical Memorandum on a prioritized basis to ensure that available resources are used to implement the most effective remedies to control the sources posing the greatest risk of impact to water quality.

¹³ The need for gating in some areas of the waterfront may come in conflict with public access requirements of an existing BCDC permit, or may require authorization by BCDC.

- Task 1: Continue semi-annual inspections at Fish Alley and adjacent facilities (FY 2003-2008)
- Task 2: Develop area plan specifically targeting Fisherman's Wharf between Pier 41 and Hyde Street Harbor (FY 2004-2005).

3.5.3

E. Element name: Illicit Discharge Detection and Elimination - Education

General Permit section: D.2.c.5

Regulatory requirement

"The Permittee must inform public employees, businesses, and the general public of the hazards that are generally associated with illegal discharges and improper disposal of waste."

Existing efforts

The Port, as part of its facility outreach effort, requires illicit discharges to cease or be tied into the City's combined sewer system. In addition, the Port conducts the following outreach aimed at reducing illicit discharges:

- Signage at Hyde Street Harbor regarding proper maintenance practices, materials storage, and waste disposal
- Co-inspections with San Francisco Department of Public Health (DPH) hazardous materials inspectors to ensure proper management of hazardous materials
- Catch basin marking by Port maintenance staff of all drains at its Pier 50 maintenance facility, as well as Hyde Street Harbor and portions of Pier 45 (fish processors)

Planned efforts

The Port will continue its current facility outreach effort. The following tasks have been identified as additional goals for the first permit cycle:

- Task 1: Port staff will develop an environmental outreach package for distribution to new tenants (FY 2003-2004). Based on facilities' activities and regulatory status, the Port will provide storm water permitting documents and water pollution prevention information to new tenants (FY 2004-2008).
- Task 2: Port staff will install signs at key areas along the waterfront providing notification of dumping prohibitions. Efforts during fiscal years 2003 through 2005 will target the southern waterfront between Pier 50 and Pier 96 (FY 2003-2008).
- Task 3: Port staff will perform outreach to Port tenants during routine facility inspections regarding illegal dumping, and encourage that tenants report observed dumping to Port staff (FY 2003-2008).
- Task 4: Port staff will stencil all catch basins within Port jurisdiction that discharge directly to the Bay (including South Beach Harbor) with a pollution prevention message. The number of catch basins requiring stenciling and a proposed schedule for the completion of stenciling will be submitted to the RWQCB with the first annual report in September 2004 (FY 2003-2008).

Information Sheet - Minimum Control Measure

3.5.3.F Measurable goals

The following measurable goals and timetables for implementation have been developed with public involvement for the BMPs and activities shown for this element of the Illicit Discharge Detection and Elimination minimum control measure.

Element Name	BMP / Activity and Significant Subactivities (indented)	MS4 Area	Responsible Agency(s)	Measurable Goal	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
Illicit Discharge Detection and Elimination (Audience = General Public/ Businesses/ Municipal Employees)										
Program (General Permit Section D.2.c.1)	Establish Hotline for Illicit Discharge Reports	Port	Port	Hotline Established; One Fact Sheet Distributed to Stakeholders		X				
	Port Maintenance Tracking/Reporting Protocols	Port	Port	Finalized Forms for collection of abandoned waste			X			
	Expand Oil Recycling to SF Marina and Treasure Island	Port	Port	Document Installation/ Outreach all berths/ Report gallons of recycled materials for all waterfront recycling		X				
	Illegal Dumping Controls (Gating/Signage)	Port	Port	Number of problem areas identified/ number of problem areas gated or posted			X			
	Group Monitoring Program Facilities Inspections	Port	Port	Inspect 10 facilities each year		X	X	X	X	X
Storm Sewer System Map (General Permit Section D.2.c.2)	Complete Field Investigations/Submit Final Map	Port	Port	Final Map to RWQCB September 2004		X				
	Identify all General Industrial Facilities on Basemap	Port	Port	Basemap with General Industrial Facilities to RWQCB September 2004			X			
	Incorporate Construction As-Built Drawings	Port	Port	All As-Built Incorporated; Annual Update of Basemap.			X	X	X	X
Ordinance (General Permit Section D.2.c.3)	Municipal Code Review – Effectively Prohibit Non-Storm Water Discharges	Port/SFPUC	City Attorney	Memo documenting review methods, results and recommendations		X				
	Enforceable Lease/Permit Provisions	Port	Port	Boilerplate lease and building permit including specific language requiring compliance with storm water regs.		X				
Plan (General Permit Section D.2.c.4)	Develop Area Plan Targeting Fisherman's Wharf	Port	Port	Planning and outreach effort targeting Pier 41 to Hyde Street Harbor			X			
	Continue Semi-Annual Inspections at Fish Alley and Adjacent Facilities	Port	Port	Inspect 5 non-Industrial Permit facilities a year.		X	X	X	X	X
Education (General Permit Section D.2.C.5)	Information for New Tenants	Port	Port	Develop outreach package for new tenants (FY 03-04). All new commercial/in industrial tenants provided outreach materials.		X	X	X	X	X
	Signage/Storm Drain Stencils	Port	Port	Stenciling schedule. (03-04). Number of drains stenciled/ signs posted.		X	X	X	X	X

3.5.4

Minimum Control Measure: Construction Site Storm Water Runoff Control

Coordinator: Bradley Wilson

Overview: To-date, the need for an extensive construction site control program at the Port of San Francisco has not been significant because very few Port construction projects exceeded the 5-acre threshold for coverage under the Statewide General Permit for Construction. However, since adoption of the Southern Waterfront SEIR in 2001, the Port has required construction SWPPPs for sites greater than one acre along the San Francisco Southern Waterfront extending from Pier 70 to Pier 96. The Port also conducts construction site control programs for water pollution prevention purposes subject to the requirements of state and federal environmental permits (e.g., Army Corp, BCDC, and RWQCB water quality certifications). These efforts will be expanded and coordinated under the Phase II General Permit program, which requires SWPPPs for all construction sites greater than one acre.

The Port Engineering and Maintenance Division oversees public and private construction on Port property. The Port's Building Inspection and Permits Section, a part of the Engineering and Maintenance Division, oversees plan review and permit issuance to assure that proposed construction work meets the statutory requirements of the Port's Building Code. The Port requires permits for all types of building and construction, including grading and demolition.

Maier Ordinance

In 1986, the San Francisco Board of Supervisors adopted a contaminated soils ordinance ("Maier Ordinance") in response to public concern about hazardous materials exposure in areas of new and redevelopment. The ordinance was developed to address hazardous levels of heavy metals and organic compounds occasionally found in areas of historic fill along San Francisco Bay shoreline. These elevated compounds likely resulted from unregulated filling of the shoreline with 1906 earthquake debris, as well as other bay fill activities performed prior to passage of the Porter-Cologne and Clean Water Acts.

The San Francisco Department of Public Health Local Oversight Program (LOP) oversees implementation of the Maier Ordinance, which is required whenever there is disturbance of greater than 50 yards of soil during construction activities along the historic Bay shoreline in San Francisco. The LOP has primary responsibility for:

- Reviewing site history reports, soil analysis reports, and site mitigation plans;
- Determining if these reports meet ordinance requirements;
- Determining the appropriateness of proposed mitigation measures; and
- Determining the applicant's compliance with overall ordinance requirements.

Port EH&S staff reviews all Port and Port tenant projects for applicability of Maier Ordinance requirements and ensures that, as appropriate, projects receive oversight from the LOP.

Information Sheet - Minimum Control Measure

Mission Bay RMP

In October 1998, San Francisco's Board of Supervisors approved the Mission Bay redevelopment project along San Francisco's Central Waterfront. The entire Mission Bay project encompasses 303 acres, of which about 158 acres is owned by Catellus Development Corporation. The remainder is held by the City, the Port and smaller property owners.

Although the Port does not own the storm drain system being constructed at Mission Bay, it does own property along the Bay shoreline that is considered part of the Mission Bay redevelopment area. A Risk Management Plan (RMP) (RWQCB and Department of Toxic Substances Control, 1999) has been prepared for redevelopment activities currently underway at Mission Bay. The RMP prescribes specific protocols for managing chemicals in soil and groundwater at Mission Bay that must be implemented prior to, during, and after development of each parcel within the Mission Bay area. Risk management activities described in the Mission Bay RMP include specific measures for the control of storm water pollution. The RMP applies to a number of Port parcels between Pier 52 and Pier 60, and its requirements are applicable to any Port construction in these areas. Regional Board staff retains direct enforcement authority over Mission Bay construction projects.

(For more information, see following Information Sheets - Minimum Control Measures)

3.5.4

A. Element name: Construction Site Storm Water Runoff Control - Ordinance

General Permit section: D.2.d.1

Regulatory requirement

"The Permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the Small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, including construction activity disturbing less than one acre if it is part of a larger common plan of development or sale that would disturb one acre or more.

The program must include development and implementation of an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions, or other effective mechanisms, to ensure compliance, to the extent allowable under State, or local law."

Existing efforts

Chapter X of the San Francisco Municipal Code directs that all dischargers must comply with all state and federal orders issued to the City, including all of the City's NPDES permits. The Municipal Code also prohibits the discharge of hazardous waste and other pollutants that would violate the City's federal and state discharge permits. Chapter I of the San Francisco Municipal Code includes requirements governing activities that disturb or remove painted surfaces containing lead-based paint on the exterior of any residential, commercial, or public building, or steel structure.

The Port's Building Code requires permits for all construction, grading and demolition on Port property. Permit applications are reviewed and conditioned by an interdisciplinary team including engineering staff, planners and environmental scientists.

Planned efforts

The City Attorney's Office will review the San Francisco Municipal Code to ensure that the City's authority includes the ability to require erosion and sediment controls, as well as sanctions, or other effective mechanisms, to ensure compliance to the extent allowable under State, or local law. The City Attorney's Office will also review the Municipal Code for potential conflicts with the Phase II requirements. If the City Attorney determine changes are necessary and achievable, it will work with appropriate City departments to develop the necessary amendments for consideration and adoption by the Board of Supervisors.

Port EH&S and Engineering Staff will review the Port Building Code to ensure that the Port's authority includes the ability to require erosion and sediment controls, and sanctions, or other effective mechanisms to ensure compliance, to the extent allowable under state and local law. If it is determined that changes are necessary, Port staff, working with the City Attorney, will develop necessary amendments to the Port Building Code for adoption by the Port Commission.

Task 1: The San Francisco City Attorney's office will review and, as necessary, amend the San Francisco Municipal Code to ensure enforceable requirements for erosion and sediment controls. A memorandum of the City Attorney's findings will

Information Sheet - Minimum Control Measure

be included in the first programmatic annual report submitted to the RWQCB in September 2004. Any necessary revisions to the San Francisco Municipal Code will be completed in FY 2004-2005 (FY 2003-2005).

- Task 2: Port staff will review the Port Building Code to ensure the Port's authority to require erosion and sediment controls and implement sanctions to ensure compliance, to the extent allowable under state and local law. If it is determined that changes are necessary, Port staff, working with the City Attorney, will develop necessary amendments to the Port Building Code for adoption by the Port Commission. A memorandum of Port staff findings will be included in the first programmatic annual report submitted to the RWQCB in September 2004. Any necessary revisions to the Port Building Code will be completed in FY 2004-2005 (FY 2003-2005).
- Task 3: Port staff will amend boilerplate building permit conditions to include requirements for compliance with the Statewide General Construction Storm Water Permit (FY 2003-2004).

3.5.4

B. Element name: Construction Site Storm Water Runoff Control – Erosion and Sediment Controls

General Permit section: D.2.d.2

Regulatory requirement

“The Permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the Small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, including construction activity disturbing less than one acre if it is part of a larger common plan of development or sale that would disturb one acre or more. The program must include development and implementation of requirements for construction site operators to implement appropriate erosion and sediment control best management practices.”

Existing efforts

Port staff tracks construction projects on Port property through its building permit process, and requires coverage under the Construction General Permit for all sites greater than one acre. Port engineering and EH&S staff review construction SWPPPs and grading plans, and conduct routine inspections during construction to ensure compliance with the Construction General Permit. Boilerplate specifications requiring compliance with storm water regulations are currently in use by Port Engineering staff.

Planned efforts

Port staff will continue review and oversight of Port construction projects and require that construction site operators implement appropriate erosion and sediment control best management practices. During the first year of the Port's storm water program, the following tasks will be implemented:

- Task 1: The Port will send at least four staff to ABAG construction storm water management training during fiscal year 2003-2004 (FY 2003-2004)
- Task 2: Port staff will develop a formalized inspection protocol to ensure appropriate implementation of storm water controls at Port construction sites (FY 2004-2005).
- Task 3: Port staff will submit a summary of all projects conditioned subject to the provisions of the General Construction Permit to the RWQCB with each annual program report, starting in September 2004. The summary will include records of construction SWPPP review and comment. (FY 2003-2008).
- Task 4: Port staff will develop a construction storm water training module, and provide at least one outreach/training along the Port's waterfront during the 2003-2004 rainy season. The targeted training goal for FY 2003-2004 is 10 construction operators (FY 2003-2008).

3.5.4

C. Element name: Construction Site Storm Water Runoff Control – Waste Controls

General Permit section: D.2.d.3

Regulatory requirement

“The Permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the Small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, including construction activity disturbing less than one acre if it is part of a larger common plan of development or sale that would disturb one acre or more.

The program must include development and implementation of requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.”

Existing efforts

The Port Building Department permits and provides oversight for construction projects on Port property. As of March 2003, all projects greater than one acre located in the Port's MS4 area are conditioned to require coverage under the Construction General Permit. Port staff performs inspections and, as necessary, enforcement to reduce the discharge of waste and pollutants other than sediment into the Port's storm drain system.

The San Francisco Department of the Environment is in the process of establishing regulations through its “Green Building Ordinance” requiring recycling of debris and other materials from construction sites for public projects. The Port has developed a boilerplate specification requiring that construction debris for all Port construction projects be recycled to the maximum extent practicable. The City's Recycling Program provides free information and assistance to promote waste reduction, reuse, and recycling in the City and County of San Francisco, including directories of recycling providers for construction and demolition debris, including asphalt, concrete, brick, glass, lumber, metal, plaster, drywall, vinyl siding, windows, doors and appliances. The Recycling Program's web page is referenced in SFPUC's *Keep It On-Site* booklet, which will be distributed to all contractors seeking building permits on Port property.

The San Francisco Department of Health's Hazardous Waste Management Program administers a Very Small Quantity Generator (VSQG) Program to help businesses to reduce hazardous waste and to comply with regulatory requirements. Since 1992, VSQG businesses have been able to use a drop-off program by making an appointment to take their waste to the City's Household Hazardous Waste Facility. Builders and painters are two of the more common VSQGs. The VSQG Program is referenced in the *Keep It On-Site* booklet.

Planned efforts

Task 1: Port staff will review and, as necessary, amend the Port Building Code to ensure language requiring construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality. Any necessary changes to the Port Building Code will be completed in FY 2004-2005 (FY 2004-2005).

Information Sheet - Minimum Control Measure

- Task 2: Port staff will ensure that all Port construction projects are conditioned subject to the recycling requirements of the City's Green Building Ordinance, and provide a summary of recycling activities associated with those projects in its annual program report, starting in September 2004 (FY 2003-2008).
- Task 3: Port staff will ensure that the *Keep It On-Site – Pollution Prevention Tips for Construction Sites* booklet, or similar outreach materials, are distributed to construction site operators working on Port property. The quantity of outreach materials distributed each year will be included in the annual storm water program report (FY 2003-2008)

3.5.4

D. Element name: Construction Site Storm Water Runoff Control – Site Plan Review

General Permit section: D.2.d.4

Regulatory requirement

“The Permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the Small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, including construction activity disturbing less than one acre if it is part of a larger common plan of development or sale that would disturb one acre or more.

The program must include development and implementation of procedures for site plan review which incorporate consideration of potential water quality impacts.”

Existing efforts

Development projects requiring City or Port approvals are subject to environmental review pursuant to the California Environmental Quality Act (CEQA). For projects requiring CEQA review, the San Francisco Planning Department reviews and certifies CEQA documentation and requires appropriate mitigation measures for construction-related water quality and hydrology impacts. Additional mitigation requirements may be included during environmental permitting performed after completion of CEQA review (e.g., Bay Conservation and Development Commission permits, U.S. Army Corps of Engineers permits, Regional Board 401 certifications). Subsequent to completion of CEQA review and environmental permitting, the Port Building Inspection and Permits section reviews and approves plans for all proposed construction on Port property. This process requires submittal of proposed site plans and application for grading permits and other controls as necessary to prevent runoff of sediment and other pollutants from construction sites. Proposed site plans and grading permit applications are routed to Port EH&S and Planning staff for review and comment.

As mentioned in the Overview to this minimum control measure, a Risk Management Plan (RMP) presents a decision framework and specific protocols for managing storm water runoff during construction at Mission Bay. Provisions of the RMP are incorporated into all Port construction projects occurring in the Mission Bay project area (Pier 52 to Pier 60). The RWQCB has also developed specific conditions for maintenance and repair work done on piers along the northern waterfront extending from Pier 22 to Hyde Street Harbor.

Planned efforts

The Port will continue to ensure that procedures for site plan review incorporate consideration of potential water quality impacts from construction sites, and appropriate project conditioning. Procedures and conditions developed by other agencies and organizations will be incorporated, as appropriate. Conditions will include development and implementation by construction site operators of erosion and sediment controls as well as waste controls, and as appropriate coverage under the State’s Construction General Permit including preparation and implementation of a SWPPP. Measurable goals for this effort are the same as those described for D.2.d.3

3.5.4

E. Element name: Construction Site Storm Water Runoff Control – Public Reporting

General Permit section: D.2.d.5

Regulatory requirement

“The Permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the Small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, including construction activity disturbing less than one acre if it is part of a larger common plan of development or sale that would disturb one acre or more.

The program must include development and implementation of procedures for receipt and consideration of information submitted by the public.”

Existing efforts

Most significant Port development projects are presented to the various waterfront advisory groups mentioned in the Overview to the Public Involvement / Participation minimum control measure (see Section 3.5.2). This process provides an opportunity for the public to provide input on potential construction-related impacts. In addition, Port Engineering and EH&S staff routinely respond to complaints regarding construction activities along the waterfront. If the incident involves hazardous materials or waste, or leaking containers, DPH staff may also respond. As necessary, Port maintenance staff responds to complaints of construction debris on streets and sidewalks along the waterfront.

Planned efforts

- Task 1: Port staff will amend the Port’s erosion control specifications for construction to include a provision requiring that contractors post notices at Port construction sites that provide contact information to members of the public for reporting potential violations (FY 2003-2004).
- Task 2: Port staff will review phone trees to ensure reports from the public are routed appropriately. Port staff will develop a protocol for tracking reports and ensuring appropriate follow up (FY 2004-2005)
- Task 3: Port construction management staff will routinely inspect ensure that signage described in above in Task 1 is posted at construction sites in all Port MS4 areas (FY 2003-2008).

3.5.4

F. Element name: Construction Site Storm Water Runoff Control – Site Inspection and Enforcement

General Permit section: D.2.d.6

Regulatory requirement

“The Permittee must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the Small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, including construction activity disturbing less than one acre if it is part of a larger common plan of development or sale that would disturb one acre or more.

The program must include development and implementation of procedures for site inspection and enforcement of control measures.”

Existing efforts

The Port assigns resident engineers for all of its construction projects, who ensure that appropriate measures are instituted for the control of pollutants in storm water runoff. Port EHS staff reviews tenant SWPPPs and inspects tenant construction projects to ensure compliance with provisions of the General Construction permit.

Planned efforts

- Task 1: The Port will send at least four staff to ABAG construction storm water management training during fiscal year 2003-2004 (FY 2003-2004)
- Task 2: Port staff will develop a formalized inspection protocol to ensure appropriate implement of SWPPPs at Port construction sites (FY 2004-2005).
- Task 3: Port staff will submit to the RWQCB with its annual storm water program reports records of inspection activities performed at construction sites located in the Port MS4 area (FY 2003-2008).

Information Sheet - Minimum Control Measure

3.5.4.G Measurable goals

The following measurable goals and timetables for implementation have been developed with public involvement for the BMPs and activities shown for this element of the Construction Site Storm Water Runoff Control minimum control measure.

Element Name	BMP / Activity and Significant Subactivities (indented)	MS4 Area	Responsible Agency(s)	Measurable Goal	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
Illicit Discharge Detection and Elimination (Audience = General Public/ Contractors-Developers/ Municipal Employees)										
Ordinance (General Permit Section D.2.d.1)	Municipal Code Review – Erosion and Sediment Controls/Sanctions	Port/SFPUC	City Attorney	Memo documenting review methods, results, and recommendations for changes		X				
	Port Building Code Review	Port	Port/City Attorney	Memo documenting review methods, results, and recommendations for changes		X	X			
	Port Building Permit Conditions	Port	Port	Amend standard Building Permit conditions to include compliance with the General Construction Permit			X			
Erosion and Sediment Controls (General Permit Section D.2.d.2). To be implemented together with Waste Controls.	Staff training	Port	Port	The Port will send at least four staff to construction storm water management training during FY 03-04.		X	X			
	Project tracking/ BMP conditioning/ General Permit coverage/ SWPPP/ Grading Plan review/ Inspections	Port	Port	Report documenting development of institutional processes, procedures, forms. Implement FY 05-06.			X	X		
	Building Code Review – Compliance with City Construction Recycling Ordinance ("Green Building")	Port	City Attorney	Memo documenting review methods, results and recommendations for changes. Any required Building Code Amendments instituted FY 05-06.			X	X		
Site Plan Review (General Permit Section D.2.d.4)	Summary of Projects Review, Conditioned, Inspected, Enforced	Port	Port	Annual summary of all projects conditioned subject to provisions of General Construction Permit and "Green Building Ordinance".		X	X	X	X	X
Public Reporting (General Permit Section D.2.d.5)	Amend Port construction plans and specifications to require contractors post notification signs	Port	Port	Amended specification to be submitted to RWQCB September 2003.		X				
	Develop protocol for tracking citizen complaints	Port	Port	Submit protocol with memo prepared subject to D.2.d.2.			X			
	Routine inspections to ensure compliance with signage requirement	Port	Port	All project sites visited once a year		X	X	X	X	X
Site Inspection and Enforcement (General Permit Section D.2.d.6)	Staff training	Port	Port	See D.2.d.2						
	Inspection protocols and reporting	Port	Port	See D.2.d.2, D.2.d.4 and D.2.d.5		X	X	X	X	X

3.5.5

Minimum Control Measure: Post-Construction Storm Water Management in New Development and Redevelopment

Coordinators: David Beaupre/John Mundy

Overview: Post construction storm water controls for new and redevelopment on Port property have already been required as permit conditions for the past several years by the RWQCB, BCDC and the Army Corp of Engineers. The Port has procedures in place to ensure their implementation. As of summer 2003, storm water treatment units have been installed at three locations along the mid-Embarcadero extending from Pier 15 to Pier 26, at the Giants Ballpark parking lots, and at Pier 48. Additional storm water treatment units are planned for the West Coast Recycling facility at Pier 96, and the Illinois Street Bridge at Islais Creek (currently in design phase).

Existing efforts aimed at developing and testing controls for storm water runoff from new and redevelopment projects will be very instructive as the Port develops this minimum control measure. As part of its waterfront planning effort, the Port initiated in June 2001 a Storm Water Management Study (Study) investigating various options (including structural controls) for managing runoff associated with land uses proposed under the Southern Waterfront Supplemental Environmental Impact Report (SEIR)(Port, 2002b). Structural BMPs and approaches to site design considered in the Study were consistent with requirements of the Phase II storm water regulations. In addition, the Phase I municipalities in the Bay Area are beginning to administer the "C.3" provision in their individual storm water permits – a process which is expected to take about three years to fully implement (2005-2006).

The Port is currently conditioning all new construction in its MS4 areas subject to the requirements of the Municipal General Permit. All new building permits and leases are reviewed for applicability of post construction controls, and the water quality analysis sections of all major CEQA documents prepared by Port Planning staff now consider both construction and post-construction storm water impacts.

(For more information, see following Information Sheets - Minimum Control Measures)

3.5.5

A. Element name: Post-Construction Storm Water Management in New Development and Redevelopment – Program

General Permit section: D.2.e.1

Regulatory requirement

“The Permittee must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the Small MS4 by ensuring that controls are in place that would prevent or minimize water quality impacts.”

Existing efforts

All significant construction projects on Port property require environmental review by Port planning and EH&S staff. During the past year and a half, Port staff has been working to incorporate storm water management controls for new and redevelopment as part of the Southern Waterfront planning process. Port staff has recently expanding this effort to include all development projects triggering discretionary environmental review, as well as lease-related construction requiring permits from the Port Building Department.

Planned efforts

During the next two years, the Port will formalize procedures for review of development and redevelopment projects. The following actions will be implemented during this time”

- Task 1: Port EH&S staff will provide at least one informational presentation on the post-construction control requirements to Port Planning, Engineering and Real Estate staff during fiscal year 2003-2004 (FY 2003-2004).
- Task 2: Port staff will report annually to the RWQCB all new construction projects conditioned subject to the post-construction control requirements on the General Municipal Permit (FY 2003-2008).
- Task 3: Port staff will amend the Port building code to include provisions that all new construction in MS4 areas of Port property must comply with post-construction control requirements of the Municipal General Permit (FY 2004-2005).
- Task 4: In coordination with the San Francisco Planning Department, the Port Planning Department will review and as necessary amend its CEQA checklist to include storm water runoff as an environmental factor required for consideration (FY 2004-2005 or 2005-2006, depending on actions by other City agencies).

3.5.5

B. Element name: Post-Construction Storm Water Management in New Development and Redevelopment - Strategies

General Permit section: D.2.e.2

Regulatory requirement

“The Permittee must develop and implement strategies, which include a combination of structural and/or non-structural BMPs appropriate for your community.”

Existing efforts

Port staff completed the Southern Waterfront Storm Water Management Study in spring 2003, and has already begun incorporation of recommended BMPs into new leases and facilities along the Southern Waterfront. Projects along the southern waterfront wherein structural BMPs have been incorporated, or are currently under negotiation, include:

- Bode Concrete facility at Pier 92
- Norcal Recycling Facility at Pier 96
- Pacific Cement facility at Pier 94
- Illinois Street Bridge at Pier 90
- Mission Valley Rock facility at Pier 92
- Rehabilitation of Piers 1,5,3 and 5

Port EH&S and Planning staff are currently participating in the development of an environmental impact report for the Mills/YMCA project at Piers 27-31, and will be reviewing conceptual designs for the Piers 30-32 Cruise Ship Terminal during the coming year. The proposed projects will incorporate a number of provisions described in Appendix D of the Municipal General Permit, including BMPs for waste management and maintenance at new restaurants¹⁴.

Planned efforts

The Port will continue conditioning new and redevelopment projects on an ad hoc basis, pending review of the Port Building Code and the City's Planning Code. During the coming year, Port staff will act to define a process to formalize requirements and administrative procedures for implementation of its post-construction controls program.

Task 1: Port staff and consultants will review the Marin County Storm Water Management Program Five Year Action Plan and the Santa Clara Valley Urban Runoff Program C.3 Workplan¹⁵. Based on the results of this review, the Port will submit to the

¹⁴ Appendix D of the Municipal General Permit describes specific BMPs that are required for various types of commercial and industrial activities, including parking, fueling and waste management.

¹⁵ “C.3” defines that section of recently amended Bay Area Phase I storm water permits that addresses post construction control requirements. The post-construction requirements of the Phase I and Phase II permits are slightly different, and the approach to post-construction control development described in the Phase I permits may in fact be more desirable to the Port of San Francisco. Port staff is currently discussing this issue with RWQCB staff.

RWQCB a workplan outlining a process to formalize all administrative provisions of its post-construction control program. The workplan will be submitted with the Port's storm water management plan annual report in September 2004 (FY 2003-2004).

Future tasks and measurable goals will be developed based on the results of Task 1, and will be reported annually in the Ports SWMP Workplan.

3.5.5

C. Element name: Post-Construction Storm Water Management in New Development and Redevelopment - Ordinance

General Permit section: D.2.e.3

Regulatory requirement

“The Permittee must use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law. The requirements must at least include the design standards in Attachment 4 of the General Permit.”

Existing efforts

Chapter 10 of the San Francisco Municipal Code directs that all dischargers must comply with all state and federal orders issued to the City, including all of the City’s NPDES permits. The Municipal Code also prohibits the discharge of hazardous waste and other pollutants that would violate the City’s federal and state discharge permits.

All significant new development and redevelopment projects at the Port require environmental review subject to CEQA. Port planning staff is already considering potential impacts associated with storm water runoff during the environmental review process for major projects (i.e., those not statutorily or categorically exempt from CEQA review).

Planned efforts

- Task 1: The City Attorney’s Office will review Chapter X of the San Francisco Municipal Code to ensure that the City’s authority includes the ability to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law. The City Attorney’s Office will also review other portions of the Municipal Code for potential conflicts with the Phase II requirements. If the reviews determine changes are necessary and achievable, the City Attorney’s Office will work with the appropriate City departments to develop the proposed changes for consideration and adoption by the Board of Supervisors.
- Task 2: Port staff will amend the Port Building Code to include provisions that project applicants include post-construction controls as required by the General Municipal Storm Water Permit. See D.2.e.1 for measurable goals associated with this effort.

3.5.5

D. Element name: Post-Construction Storm Water Management in New Development and Redevelopment – Operation and Maintenance

General Permit section: D.2.e.4

Regulatory requirement

“The Permittee must ensure adequate long-term operation and maintenance of MBPS.”

Existing efforts

Lease agreements between the Port and its tenants require all tenants to comply with local, state, and federal laws and regulations, including storm water regulations. Port staff works with tenants during the leasing process to consider and select treatment controls, when appropriate and feasible. In some instances, new Port construction triggers permitting requirements from the Regional Board (401 certification) or BCDC. Maintenance requirements are often included as a condition of these permits and authorizations.

Hanson Aggregates at Pier 94 and Imperial Parking at the Giants Ballpark both operate storm water treatment units on Port property that they are responsible for maintaining. The San Francisco Department of Public Works (SFPD), under Memorandum of Understanding with the Port, is responsible for maintaining three storm water treatment units located along the Embarcadero Roadway. Funding has been apportioned in the current fiscal year budget for maintenance of those treatment units that are the Port's responsibility. Port maintenance staff recently received authorization to purchase a new vector truck that will be used to maintain the storm water treatment units.

Planned efforts

During the coming year, Port staff will develop a maintenance schedule for the storm water treatment units at Pier 45 and Pier 48, and confirm with SFPD and other Port tenants that maintenance schedules are in place for their storm water treatment units. As required by specific Regional Board and BCDC permit conditions, the Port will report on the maintenance of structural MBPS associated with new construction projects.

- Task 1: Port staff will purchase a new Vector truck for the purpose of maintaining storm water treatment units (FY 2003-2004).
- Task 2: Port staff will prepare a workplan for verification of operation and maintenance of storm water treatment units on Port property, including survey of all tenant treatment units and their maintenance schedules (FY 2004-2005)
- Task 3: Port staff will amend lease language to include, as necessary, specific provisions, for maintenance of storm water treatment units (FY 2004-2005).

Information Sheet - Minimum Control Measure

Measurable goals

The following measurable goals and timetables for implementation have been developed with public involvement for the BMPs and activities shown for this element of the Post-Construction Storm Water Management in New Development and Redevelopment minimum control measure.

Element Name	BMP / Activity and Significant Subactivities (indented)	MS4 Area	Responsible Agency(s)	Measurable Goal	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
Post-Construction Storm Water Management (Audience = General Public/ Contractors-Developers/ Municipal Employees)										
Program (General Permit Section D.2.e.1)	Interdivisional Information Presentations	Port	Port	At least one informational presentation to Port Engineering, Planning and Real Estate staff		X				
	Annual Summary of Construction Projects	Port	Port	Port will submit with each annual storm water report a summary of all projects conditioned with storm water controls		X	X	X	X	X
	Port Building Code Amendments	Port	Port	Port building code amended to require all construction in MS4 areas comply with post-construction control requirements of General Muni Permit			X			
	Amend CEQA Checklist	Port	Port/ SF Planning	CEQA checklist amended to include storm water runoff as environmental factor required for consideration			X	X		
	Review of other Bay Area storm water program documents	Port	Port	Workplan submitted with first annual report outlining a process to formalize all administrative procedures for post-construction control.		X				
Strategies (General Permit Section D.2.e.2)	See D.2.e.1, "Port Building Code Amendments"	Port	Port	See D.2.e.1			X			
Ordinance (General Permit Section D.2.e.3)	Purchase Vector Truck for Maintenance of BMPs	Port	Port	New Vector Truck		X				
Operation and Maintenance (General Permit Section D.2.e.4)	Workplan for O&M Verification	Port	Port	Port staff will develop workplan for verification of BMP operation and maintenance agreements.			X			
	Boilerplate Lease Language Amendments	Port	Port	Port staff will review boilerplate lease language and, as necessary, amend to include requirements for maintenance of post-construction BMPs			X			

3.5.6

Minimum Control Measure: Pollution Prevention / Good Housekeeping for Municipal Operations

Coordinator: Tom Petersen

Overview: Port maintenance staff already conducts a number of pollution prevention and good housekeeping BMPs in compliance with requirements of the General Industrial Permit and the San Francisco Integrated Pest Management Program (IPM). These BMPs will be reviewed, and if necessary, revised to meet the letter and intent of the Phase II General Permit. Port staff will develop procedures to better track and report current housekeeping and operational efforts.

(For more information, see following Information Sheets - Minimum Control Measures)

3.5.6

A. Element name: Pollution Prevention / Good Housekeeping for Municipal Operations – Program

General Permit section: D.2.f.1

Regulatory requirement

“The Permittee must develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.”

Existing efforts

The Port administers a maintenance program that meets many of the requirements of the general permit. Much of the initial effort to comply with the Municipal Housekeeping minimum control measure will involve establishing administrative procedures for the tracking and measuring of activities already performed by Port staff. The potential impact and performance of operation and maintenance activities relative to storm water are addressed by the following at the Port:

- Coverage under the Industrial General Permit for all Port maintenance and harbor facilities located in the MS4 area;
- SWPPPs for facilities at Hyde Street Commercial Fishing Harbor and Pier 50 D;
- *Draft Report and Implementation Plan, Port of San Francisco Port-Wide Storm Water Management Program* (Port, 2001);
- *Engineering Controls Technical Memorandum, Port of San Francisco Port-Wide Storm Water Management Program* (Port, 2003a);
- *San Francisco Oil Spill Prevention and Response Plan* (Port, 1998a);
- *Fisherman's Wharf Harbor Operations Plan* (Port, 2000b);
- Implementation of San Francisco's IPM Ordinance and Program – The Port has never used products labeled “Danger” and has eliminated the use of products labeled as “Warning.” During the past year, Port gardeners reported no use of chlorpyrifos and diazinon based products;
- Daily street sweeping - The Port has a dedicated street sweeping crew that operates daily between the hours of midnight and 8 a.m. along the waterfront. Street sweeping waste is collected in bins at Pier 90 prior to disposal at the Tunnel Road transfer facility in San Francisco;
- Recovery of abandoned and sunken vessels along the Port waterfront;
- Hazardous waste recycling operations along Port waterfront;
- Cleanup of abandoned waste and debris along the Port waterfront;
- As-needed catch basin cleaning program - Port maintenance staff operates a Vactor truck to clean out catch basins along the waterfront on an as-needed basis. Due to age and condition, use of the Vactor is currently limited to spill response and plumbing emergencies (i.e., clogged catch basins);

In order to administer more effectively its catch basin cleaning program, the Port has budgeted for the purchase of a new Vactor truck in fiscal year 2003-2004.

Information Sheet - Minimum Control Measure

Port Facilities and Maintenance is located at Pier 50, Shed D off of Terry Francois Boulevard in an area along the San Francisco Southern Waterfront known as China Basin. The facility consists of a 104,827 square foot building that includes administration and shops for all of the construction trades and 246,139 square feet of outside equipment storage and parking. The entire facility is paved and drains to one of three small collection systems that discharge directly to the Bay. The primary function of this site is to provide a work and storage area for the variety of trade and craftsmen working in the Ports maintenance group. The shed is divided up into separate shops for each trade. Most of the machinery and supplies are stored in the shed. Only larger items such as forklifts and trailers are stored outside, in most cases under cover. Additional materials used by the Port maintenance staff are stored at a lot near the western edge of Pier 90, including new pilings, replacement parts, and utilities equipment. The Pier 90 maintenance yard is also used as a staging area for trash and debris collected by Port staff during day-to-day housekeeping operations along the San Francisco waterfront. Port maintenance staff receives annual training in hazardous materials awareness, storm water pollution control, and spill response.

During 2001-2002, as part of the implementation of the City's Integrated Pest Management (IPM) Ordinance and Program the City's Department of the Environment (DOE) hosted a meeting to develop a rain policy. The meeting included City staff, community members, and outside experts on pesticide application. The policy outlined procedures and precautions for use of pesticides during the rainy season to minimize potential draft or runoff (CCSF, 2003b). On a monthly basis, a Technical Advisory Committee convenes to exchange information, discuss current pest control techniques, and representatives from the major City departments meet to discuss implementation of the IPM Program. Participants include departmental IPM coordinators, safety and environmental compliance staff, pest control contractors, independent IPM experts, and community members.

Planned efforts

- Task 1: Port maintenance staff will establish procedures for measuring and recording the contents of street sweeping trucks at the end of every shift. Records of street sweeping activities will be submitted with the annual report for the Port storm water management program, starting in September 2004 (FY 2003-2008)
- Task 2: Port maintenance staff will establish a procedure for tracking the number of responses to illegal dumping incidents, included quantities of material collected for disposal.
- Task 3: Based on the results of the current storm water collection system mapping effort, a schedule for the catch basin cleaning will be developed by maintenance staff. This schedule, as well as records of catch basin cleaning performed in FY 2003-2004 will be submitted with the annual report for the Port storm water management program, starting in September 2004 (FY 2003-2008).
- Task 4: Port gardeners will continue activities performed subject to the City's IPM program. A summary of the Port's IPM efforts will be included with the annual report for the Port storm water management program, starting in September 2004.

3.5.6

B. Element name: Pollution Prevention / Good Housekeeping for Municipal Operations – Employee Training

General Permit section: D.2.f.2

Regulatory requirement

“The Permittee must, using training materials that are available from EPA, the State, or other organizations, your program must include employee training to prevent or reduce storm water pollution from activities such as park and open space maintenance, fleet building maintenance, new construction and land disturbances, and storm water system maintenance.”

Existing efforts

The Port conducts regular training sessions for maintenance staff that cover environmental health issues including spill response, storm water management and hazardous materials awareness. The San Francisco Department of Public Health performs routine inspections of Port facilities to ensure compliance with federal, state and local hazardous materials laws and regulations.

Planned efforts

Task 1: Every year, the Port will provide its maintenance staff at least one training session on storm water management and one training session on hazardous materials management. Documentation of this training will be submitted in the annual report for the Port storm water management program, starting in September 2004.

Information Sheet - Minimum Control Measure

3.5.6.C Measurable goals

The following measurable goals and timetables for implementation have been developed with public involvement for the BMPs and activities shown for this element of the Pollution Prevention/ Good Housekeeping for Municipal Operations minimum control measure.

Element Name	BMP / Activity and Significant Subactivities (indented)	MS4 Area	Responsible Agency(s)	Measurable Goal	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08
Pollution Prevention/ Good Housekeeping for Municipal Operations (Audience = Municipal Employees)										
Program (General Permit Section D.2.f.1)	Tracking/ reporting for street sweeping	Port	Port	Develop forms and reporting procedures to track quantity of materials picked up by street sweepers			X			
	Tracking/ reporting for illegal dumping response	Port	Port	Develop forms and reporting procedures to track quantity of illegally dumped materials picked up by Port maintenance staff			X			
	Schedule/ tracking/ reporting for catch basin cleaning	Port	Port	Develop workplan for catch basin cleanout (04-05). Annual reporting of catch basin cleanout (05-08)			X	X	X	X
	IPM Program	Port	Port	Provide annual report of pesticide use. Minimize use of toxic pesticides, including chlorpyrifos and diazinon.		X	X	X	X	X
	Employee Training	Port	Port	Port maintenance staff will receive at least one storm water training and one hazardous materials training each year.		X				
Employee Training (General Permit Section D.2.f.2)	Employee Training	Port	Port							

IV. GLOSSARY

Agencies – List of agencies and acronyms / short names, as appropriate

San Francisco

CCSF / City – City and County of San Francisco
 City Attorney's Office
 City Planning Department
 DBI – Department of Building Inspection
 Commercial Plan Check Division and Residential Plan Check Division
 MPC/UMB – Major Projects and UMB Plan Check Division
 DOE – Department of the Environment
 DPH – Department of Public Health
 DPW – Department of Public Works
 BCM – Bureau of Construction Management
 BOE – Bureau of Engineering
 BSES – Bureau of Street and Environmental Services
 Port – Port of San Francisco
 EH&S – Environmental Health & Safety
 Planning and Development Division
 Real Estate Department
 Maintenance Division
 Engineering Division
 RPD – Recreation and Park Department
 San Francisco Recreation and Park Commission
 SFPUC – San Francisco Public Utilities Commission
 BERM – Bureau of Environmental Regulation and Management
 SFRA – San Francisco Redevelopment Agency

State

BCDC – Bay Conservation and Development Commission
 Caltrans – California Department of Transportation
 DTSC – Department of Toxic Substances Control
 Regional Board (RWQCB) – Regional Water Quality Control Board-San Francisco Bay Region
 State Board – State Water Resources Control Board
 State Department of Parks and Recreation

Federal

DOI – Department of the Interior
 GGNRA – Golden Gate National Recreation Area
 U.S. Army Corps of Engineers
 USEPA – U.S. Environmental Protection Agency
 USNavy

Other

CASQA – California Stormwater Quality Association
 PGA – Professional Golfers Association of America

Terms – Definitions of terms as they appear in the Statewide General Permit for Storm Water Discharges from Small Municipalities (“General Permit”).

100,000 Square Foot Commercial Development – 100,000 Square Foot Commercial Development means any commercial development that creates at least 100,000 square feet of impermeable area, including parking areas.

Automotive Repair Shop – Automotive Repair Shop means a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

Authorized Non-Storm Water Discharges – Authorized non-storm water discharges are certain categories of discharges that are not composed entirely of storm water but are not found to pose a threat to water quality. They include: water line flushing; landscape irrigation; diverted stream flows; rising ground waters; uncontaminated ground water infiltration (as defined at 40 CFR §35.2005(20)) to separate storm sewers; uncontaminated pumped ground water; discharges from potable water sources; foundation drains; air conditioning condensate; irrigation water; springs; water from crawl space pumps; footing drains; lawn watering; individual residential car washing; flows from riparian habitats and wetlands; dechlorinated swimming pool discharges; and discharges or flows from emergency fire fighting activities. If any of the above authorized nonstorm water discharges (except flows from fire fighting activities) are found to cause or contribute to an exceedance of water quality standards or cause or threaten to cause a condition of nuisance or pollution, the category of discharge must be prohibited.

Best Management Practices (BMPs) – Best management practices means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of ‘waters of the United States.’ BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. (40 CFR §122.2)

Commercial Development – Commercial Development means any development on private land that is not heavy industrial or residential. The category includes, but is not limited to: hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, multi-apartment buildings, car wash facilities, mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses and other light industrial complexes.

Directly Connected Impervious Area (DCIA) – DCIA is the acronym for directly connected impervious areas and means the area covered by a building, impermeable pavement, and/ or other impervious surfaces, which drains directly into the storm drain without first flowing across permeable land area (e.g. lawns).

Discretionary Project – Discretionary Project means a project which requires the exercise of judgement or deliberation when the public agency or public body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations.

Greater than (>) 9 unit home subdivision – Greater than 9 unit home subdivision means any subdivision being developed for 10 or more single-family or multi-family dwelling units.

Hillside – Hillside means property located in an area with known erosive soil conditions, where the development contemplates grading on any natural slope that is twenty-five percent or greater.

Infiltration – Infiltration means the downward entry of water into the surface of the soil.

Measurable Goal – Measurable goals are definable tasks or accomplishments that are associated with implementing best management practices.

Minimum Control Measure – A minimum control measure is a storm water program area that must be addressed (best management practices implemented to accomplish the program goal) by all regulated Small MS4s. The following six minimum control measures are required to be addressed by the regulated Small MS4s: Public Education and Outreach on storm Water Impacts, Public Involvement/Participation, Illicit Discharge Detection and Elimination, construction Site Storm Water Runoff Control, Post-Construction Storm Water Management in New Development and Redevelopment, and Pollution Prevention/Good Housekeeping for Municipal Operations.

New Development – New Development means land disturbing activities; structural development, including construction or installation of a building or structure, creation of impervious surfaces; and land subdivision.

Offsite Facility – An offsite facility is a geographically non-adjacent or discontinuous site that serves, or is secondary to, the primary facility and has the same owner as the primary facility. Storm water discharges from an offsite facility must be permitted if it meets the definition of a regulated Small MS4 itself. The offsite facility may satisfy this permitting requirement if the SWMP of the primary facility addresses the offsite facility, such that the permitted area of the primary facility includes the offsite area.

Outfall – A point source at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States. (40 CFR §122.26(b)(9))

Parking Lot – Parking Lot means land area or facility for the temporary parking or storage of motor vehicles used personally, for business or for commerce with a lot size of 5,000 square feet or more, or with 25 or more parking spaces.

Point Source – Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. (40 CFR §122.2)

Regulated Small MS4 – A regulated Small MS4 is a Small MS4 that is required to be permitted for discharging storm water through its MS4 to waters of the U.S. and is designated either automatically by the U.S. EPA because it is located within an urbanized area, or designated by

the SWRCB or RWQCB in accordance with the designation criteria listed at Finding 11 of the General Permit.

Redevelopment – Redevelopment means, on an already developed site, the creation or addition of at least 5,000 square feet of impervious area. Redevelopment includes, but is not limited to: the expansion of a building footprint or addition of a structure; structural development including an increase in gross floor area and/ or exterior construction or remodeling; and land disturbing activities related with structural or impervious surfaces. Where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to these Design Standards, the Design Standards apply only to the addition, and not to the entire development.

Restaurant – Restaurant means a stand-alone facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption. (SIC code 5812).

Retail Gasoline Outlet – Retail Gasoline Outlet means any facility engaged in selling gasoline and lubricating oils.

Small Municipal Separate Storm Sewer System (Small MS4) – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that are:

- (i) Owned or operated by the United States, a State, city, town, boroughs, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.
- (ii) Not defined as “large” or “medium” municipal separate storm sewer systems
- (iii) This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings. (40 CFR §122.26(b)(16))

Separate Implementing Entity (SIE) – A Separate Implementing Entity is an entity, such as a municipality, agency, or special district, other than the entity in question, that implements parts or all of a storm water program for a Permittee. The SIE may also be permitted under 40 CFR Part 122. Arrangements of one entity implementing a program for another entity is subject to approval by the Regional Water Quality Control Board Executive Officer.

Source Control BMP – Source Control BMP means any schedules of activities, prohibitions of practices, maintenance procedures, managerial practices or operational practices that aim to prevent storm water pollution by reducing the potential for contamination at the source of pollution.

Storm Event – Storm Event means a rainfall event that produces more than 0.1 inch of precipitation and that, which is separated from the previous storm event by at least 72 hours of dry weather.

Structural BMP – Structural BMP means any structural facility designed and constructed to mitigate the adverse impacts of storm water and urban runoff pollution (e.g. canopy, structural enclosure). The category may include both Treatment Control BMPs and Source Control BMPs.

Treatment – Treatment means the application of engineered systems that use physical, chemical, or biological processes to remove pollutants. Such processes include, but are not limited to, filtration, gravity settling, media adsorption, biodegradation, biological uptake, chemical oxidation and UV radiation.

Treatment Control BMP – Treatment Control BMP means any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process.

V. REFERENCES

CCSF, 1998a. *San Francisco Oil Spill Prevention and Response Plan*. Prepared by City and County of San Francisco.

CCSF, 2003a. *Initial Storm Water Management Plan, 2003-2004*. Prepared by Geoff Brosseau.

CCSF, 2003b. *Integrated Pest Management Program, 2001/2002 Annual Report*. Prepared by Department of the Environment.

Regional Water Quality Control Board and Department of Toxic Substances Control, 1999. *Risk Management Plan, Mission Bay Area, San Francisco, California*. Prepared by ENVIRON.

Port of San Francisco (Port), 2000a. *Work Plan for Storm Water Discharge Evaluation – Port of San Francisco*. Prepared by Carol Bach.

Port, 2000b. *Fisherman's Wharf Harbor Operations Plan*. Prepared by Port of San Francisco.

Port, 2001a. *Draft Report and Implementation Plan, Port of San Francisco Port-Wide Storm Water Management Program*. Prepared by Carol Bach and Geoff Brosseau.

Port 2001b. *San Francisco Southern Waterfront Final Supplemental Environmental Impact Report (SEIR)*. Prepared by Environmental Science Associates

Port 2001c. *Port of San Francisco's Storm Water Pollution Prevention Plan and Best Management Practices, Pier 50D, San Francisco, California*. Prepared by Tim Felton and Tim Gallagher.

Port, 2002a. *Port of San Francisco's Storm Water Pollution Prevention Plan and Best Management Practices, Hyde Street Commercial Fishing Harbor*. Prepared by John Mundy and Tim Gallagher

Port, 2003a. *Storm Water Management Study for Port of San Francisco, Southern Waterfront, Pier 70 to Pier 96 – Revised Draft*. Prepared by Treadwell and Rollo, and Watershed Resources Collaboration Group.

Port, 2003b. *Engineering Controls Technical Memorandum, Port of San Francisco Port-Wide Storm Water Management Program*. Prepared by Olivia Chen Consultants.

SWRCB, 1999. *Consolidated Toxic Hot Spots Cleanup Plan, Volume II: Regional Cleanup Plans*

SWRCB, 2001, *Staff Report: Proposed Revisions to Section 303(d) List and Priorities for Development of Total Maximum Daily Loads (TMDLs) for the San Francisco Bay Region*

SWRCB, 2003, 2002 CWA List of Water Quality Limited Segments,
<http://www.swrcb.ca.gov/tmdl/docs/2002reg2303dlist.pdf>

USEPA, 1994. *Combined Sewer Overflow (CSO) Control Policy*, Federal Register Notice (59) 18688, April 19, 1994, Part 7, EPA-833-Z-94-001.

Internet Resources

California BMP Handbooks (www.cabmphandbooks.org)

Caltrans Storm Water Management Program
(www.dot.ca.gov/hq/env/stormwater/index.htm)

California Storm Water Quality Association (www.casqa.org)

Center for Watershed Protection (www.cwp.org)

Clean Estuary Project (www.cleanestuary.org)

San Francisco Regional Water Quality Control Board (www.swrcb.ca.gov/rwqcb2)

State Water Resources Control Board Storm Water Program
(www.swrcb.ca.gov/stowmwtr/index.html)

Storm Water Managers Resource Center (www.stormwatercenter.net)

USEPA Storm Water Program (http://cfpub.epa.gov/npdes/home.cfm?program_id=6)

